

**IDENTIFYING THE ROLES OF THE SEPARATE GOVERNMENTAL AGENCIES
IN COUNTERING THE PROLIFERATION OF WEAPONS OF MASS
DESTRUCTION AMONG NONSTATE ACTORS THROUGHOUT
THE COUNTERPROLIFERATION CONTINUUM**

A thesis presented to the faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirement for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

**SCOTT C. COTTRELL, MAJOR, USMC
B.S., University of Missouri, Columbia, Missouri, 1982**

Fort Leavenworth, Kansas

1997

Approved for public release; distribution is unlimited.

19971114 068

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY <i>(Leave blank)</i>	2. REPORT DATE 6 June 1997	3. REPORT TYPE AND DATES COVERED Master's Thesis, 4 Aug 96-6 June 1997	
4. TITLE AND SUBTITLE Identifying the Roles of the Separate Governmental Agencies in Countering the Proliferation of Weapons of Mass Destruction Among Nonstate Actors Throughout the Counterproliferation Continuum		5. FUNDING NUMBERS	
6. AUTHOR(S) Major Scott C. Cottrell, U.S. Marine Corps			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College Attn: ATZL-SWD-GD Fort Leavenworth, Kansas 66027-1352		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE A	
13. ABSTRACT <i>(Maximum 200 words)</i> The threat posed by nation states and nonstate actors armed with WMD is arguably the greatest, current threat to US national security. Governmental efforts to counter this threat are inherently inefficient due to the current organizational and command and control (C2) structure. This study first groups governmental efforts to counter this threat into ten functional areas which are then collated into a model christened the Counterproliferation Continuum. This model defines the roles of the major, separate governmental agencies in each functional area. The Counterproliferation Continuum demonstrates a linkage between the counterterrorism and nonproliferation/counterproliferation arenas. Further, this thesis identifies shortfalls in the current organizational and C2 structures and proposes changes to optimize governmental efforts. Rectifying required shortfalls requires the formation of a controlling entity, routinely involved in the process and empowered with the ability to coordinate interagency efforts and streamline the flow of information and resources. This study researches options and proposes a C2 organizational and structural regrouping which will more efficiently focus governmental efforts to counter this threat.			
14. SUBJECT TERMS command and control, counterproliferation continuum		15. NUMBER OF PAGES	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT

DTIC QUALITY INSPECTED 2

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to **stay within the lines** to meet **optical scanning requirements**.

Block 1. Agency Use Only (Leave blank).

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered.

State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C	- Contract	PR	- Project
G	- Grant	TA	- Task
PE	- Program Element	WU	- Work Unit

Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of ...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement.

Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

- | | |
|-------------|---|
| DOD | - See DoDD 5230.24, "Distribution Statements on Technical Documents." |
| DOE | - See authorities. |
| NASA | - See Handbook NHB 2200.2. |
| NTIS | - Leave blank. |

Block 12b. Distribution Code.

- | | |
|-------------|---|
| DOD | - Leave blank. |
| DOE | - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports. |
| NASA | - Leave Blank. |
| NTIS | - Leave Blank. |

Block 13. Abstract. Include a brief (**Maximum 200 words**) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (**NTIS only**).

Blocks 17.-19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

**IDENTIFYING THE ROLES OF THE SEPARATE GOVERNMENTAL AGENCIES
IN COUNTERING THE PROLIFERATION OF WEAPONS OF MASS
DESTRUCTION AMONG NONSTATE ACTORS THROUGHOUT
THE COUNTERPROLIFERATION CONTINUUM**

A thesis presented to the faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirement for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

SCOTT C. COTTRELL, MAJOR, USMC
B.S., University of Missouri, Columbia, Missouri, 1982

Fort Leavenworth, Kansas
1997

Approved for public release; distribution is unlimited.

MASTER OF MILITARY ART AND SCIENCE

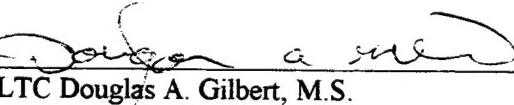
THESIS APPROVAL PAGE

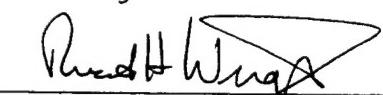
Name of Candidate: MAJ Scott C. Cottrell

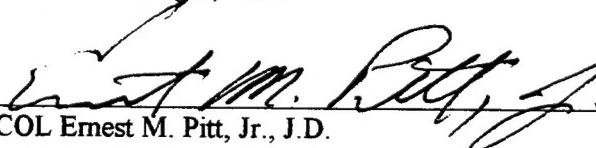
Thesis Title: Identifying the Roles of the Separate Governmental Agencies in Countering the Proliferation of Weapons of Mass Destruction Among Nonstate Actors Throughout the Counterproliferation Continuum

Approved by:

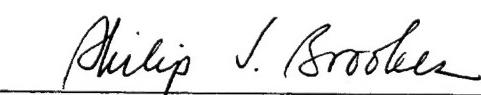

_____, Thesis Committee Chairman
LTC Curt F. Weimer, B.A..


_____, Member
LTC Douglas A. Gilbert, M.S.


_____, Member
Richard H. Wright, M.A.


_____, Member, Consulting Faculty
COL Ernest M. Pitt, Jr., J.D.

Accepted this 6th day of June 1997 by:


_____, Director, Graduate Degree Programs
Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

**IDENTIFYING THE ROLES OF THE SEPARATE GOVERNMENTAL AGENCIES IN
COUNTERING THE PROLIFERATION OF WEAPONS OF MASS DESTRUCTION
AMONG NONSTATE ACTORS THROUGHOUT THE
COUNTERPROLIFERATION CONTINUUM** by Major Scott C. Cottrell, USMC,
137 pages.

The threat posed by nation states and nonstate actors armed with WMD is arguably the greatest, current threat to national security. Governmental efforts to counter this threat are inherently inefficient due to the current organizational and C2 structure.

This study first groups governmental efforts to counter this threat into ten functional areas which are then collated into a model christened the Counterproliferation Continuum. This continuum defines the roles of the major, separate governmental agencies in each functional area. The Counterproliferation Continuum demonstrates a linkage between the counterterrorism and nonproliferation/counterproliferation arenas. Further, this thesis identifies shortfalls in the current organizational and C2 structures and proposes changes to optimize governmental efforts.

Rectifying identified shortfalls requires the formation of a controlling entity, routinely involved in the process and empowered with the ability to coordinate interagency efforts and streamline the flow of information and resources. This study researches options and proposes a C2 organizational and structural regrouping which will more efficiently focus governmental efforts to counter this threat.

ACKNOWLEDGMENTS

This thesis could not have been written without the assistance and support of my thesis committee, instructors, associates at the United States Army Command and General Staff College, Fort Leavenworth, Kansas, and most importantly, my family.

My wife, Kyle, is as much responsible for this thesis as am I. She has unselfishly supported me with the most valuable commodity required by any student—time. Always the perfect Mother to our two amazing children, Kyle, not only created a wonderful home for us all but was the source of advice and counsel throughout this study. Without her patience, understanding and support this thesis would not have been written.

Next, my committee chairman, LTC Weimer, has been a friend, supporter, and racquetball instructor throughout much of this year. His guidance, friendship, and professionalism have been instrumental in the completion of this work. The remainder of my research committee, COL Pitt, LTC Gilbert, and Mr. Richard Wright, forced me to reexamine many of my ideas and fostered my intellectual growth throughout this process. Dr. Tim Sanz from the Foreign Military Studies Office and Mr. Bruce Hoglund, provided me with initial advice and assistance. Between them, they opened up a new world for me on the Internet. Without their early guidance and advice this paper would not have been possible.

Last but certainly not least, my thanks and appreciation go to the staffs of the CGSC Graduate Degree Programs and the Combined Arms Research Library for their professionalism, assistance, and unselfish support of student requests.

TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ABSTRACT	iii
ACKNOWLEDGMENTS	iv
CHAPTER	
1. INTRODUCTION	01
2. REVIEW OF LITERATURE	21
3. RESEARCH METHODOLOGY	39
4. DEFINING THE THREAT	43
5. COUNTERING THE THREAT	59
6. ISSUES, DISCUSSIONS AND RECOMMENDATIONS	107
7. SUMMARY	125
BIBLIOGRAPHY	130
INITIAL DISTRIBUTION LIST	136

CHAPTER 1

INTRODUCTION

This thesis identifies a clear and direct threat to the security of the United States of America: the proliferation of weapons of mass destruction (WMD) among nonstate actors. This thesis will briefly summarize the threat facing the United States (US), define the Counterproliferation Continuum (US effort to counter this threat), identify the roles of the separate governmental agencies throughout this continuum, and will examine the adequacy of the current interagency relationships and command and control system in countering this threat.

The Research Question

What are the roles of the separate governmental agencies in countering the proliferation of WMD among nonstate actors during each phase of the Counterproliferation Continuum?

Subordinate Questions

1. What is the Counterproliferation Continuum?
2. What is the threat to the US, defined in terms of organization, capabilities and motivation?
3. What is the national policy concerning this threat?
4. What governmental organizations are involved in countering this threat? What is the role of each organization during each segment of the Counterproliferation Continuum?

5. Are the current interagency relationships and “command and control” structure adequate to orchestrate the national assets necessary to counter this threat?

Context of the Problem and the Research Question

General

Currently, the US is faced with an apparent increase in large-scale terrorism conducted utilizing both conventional weapons and WMD. This threat, although not new, has been exacerbated by the fall of the former Soviet Union (FSU).¹

Prior to the fall of the Soviet Empire, the Soviet Union and the US were, arguably, the principal world powers, with conflicting global strategies and goals. During this era, the development, maintenance, and acquisition of WMD were largely controlled by these two superpowers, albeit with some “leakage” of knowledge and technology to other nations. These arsenals of WMD were controlled, through policy, treaty, or possession, by the two superpowers and meant for use during overt nation-to-nation conflict.

The collapse of the Soviet Union had profound and far-reaching effects on the world, most notably in the military, economic, and political sectors. Although the totality of the effects resulting from the breakup of the FSU are not yet apparent, some initial effects with relevance to this paper are obvious; these effects will be generalized below and detailed later in this chapter:

1. Currently, the US is clearly the dominant world power (the 1991 Gulf War provided a glaring example of the formidable military power and potential of the US), with few, if any, nation states capable of engaging in an overt conflict with the US.
2. The US, with the intent of enhancing its own security and economic posture, has clearly stated that its primary objectives include: “enhancing our security with military forces that are ready to fight and with effective representation abroad; to bolster America’s economic

revitalization; and to promote democracy abroad.”² To accomplish these goals the US has adopted a “Strategy of Engagement and Enlargement,” which has reinforced its role as the dominant world power.

3. That US dominance and overseas presence has made it the target of recent terrorist attacks and further, that the potential for further violence against the US is thought by many to be greatly escalating.³

4. The collapse of the FSU increased the number of “players” on the world stage; a stage no longer completely dominated by the strategies and objectives of the US and the FSU. Today, smaller nation-states, religious organizations, and economic cartels are assuming a much larger role on the world stage, some with objectives and strategies directly in conflict with those of the US.

5. The collapse of the FSU resulted in potential “leakages” of scientists, technicians, and knowledge regarding WMD.⁴ Access to former Soviet scientists and technicians can provide the nonstate actor with knowledge of the former Soviet Union’s arsenal of WMD.⁵ Further, there have been accounts of attempted black market sales of actual weapons or the materials necessary to make them.⁶

6. That direct availability and the ability to produce mass WMD have increased dramatically since the breakup of the FSU.

7. That the President of the United States, in recognition of the threat posed by the proliferation of WMD declared, “a national emergency with respect to the unusual and extraordinary threat posed by the proliferation of nuclear, biological, and chemical weapons (WMD) and the means of delivering them.”⁷

The threat of an attack on the US or her interests by nonstate actors armed with WMD is currently the most probable threat to US national security. This form of terrorism, intent on great

lethality to further its aims, has at its bidding WMD. For the purposes of this paper the author will utilize the definition of “weapons of mass destruction” as listed in the Section 1403, Title XIV of the National Defense Authorization Act. Weapons of mass destruction are identified as “any weapon or device that is intended, or has the capability, to cause death or serious bodily injury to a significant number of people through the release, dissemination, or impact of: (a) toxic or poisonous chemicals or their precursors; (b) a disease organism; or (c) radiation or radioactivity.⁸ This definition includes the detonation of a nuclear weapon or the intended dispersal of radioactive material, through conventional means to kill personnel or deny use of an area.

Although great destruction and death have been caused by “conventional” (non-WMD) weapons (for example, the 1983 attack on the Marine Barracks in Beirut Lebanon; the 1993 bombing of the World Trade Center; and the Oklahoma City Bombing in 1995 were all examples of terrorist usage of “conventional” weapons), this paper will focus on the threat posed by WMD as a tool of nonstate actors (a term encompassing terrorists). The governmental agencies, their interagency relationships, assets, and command and control (C2) structure designed to focus on “conventional” terrorist activity utilizing conventional weapons must now also be capable of preventing and responding to terrorist employment of WMD.

Although this paper focuses on WMD the countering of the threat posed by terrorists bent on large-scale destruction and death, through any means, is one of the primary issues of this study. WMD offer the terrorist a means of achieving greater lethality, destruction, and effect, thereby focusing world media on his issues. In an extreme case, WMD provides the potential terrorist with the capability to attack principal command and control nodes or population centers in the United States or allied nations. In the past, WMD have been principally associated with nation states for use in overt conflict. With the increased availability of WMD resulting from the breakup of the FSU (both directly and indirectly), most authorities on the subject of terrorism speculate it is only a

matter of time before WMD are utilized in a successful terrorist attack on the US or her interests.⁹

Such an attack would result in a level of destruction never before associated with the work of terrorist activities.

These initial comments have been offered to provide a conceptual understanding of the threat and will be explained in further detail later in this paper. Further, this chapter will detail specific instances where conventional weapons were utilized by terrorists to achieve large-scale destruction; these examples are cited only to document the evolving threat posed by large-scale terrorism and the growing potential for terrorist use of WMD.

The Threat

The tools available to terrorists have evolved very quickly since the fall of the Soviet Union.¹⁰ Although the traditional tools of the terrorist have been and remain the gun and the bomb, the traditional car-bombing associated with "cold war terrorism" is now being replaced by the use of chemical agents and high explosive bombs. Terrorist intent now encompasses large-scale death and destruction.¹¹ Today, the terrorist has at his disposal, should he have the willingness to use, the assets to acquire or the means to produce them, chemical, biological, and nuclear weapons. Terrorist use of WMD could easily result in Hiroshima-type losses and effects.

Although hard for most Americans to imagine or accept, access to WMD is no longer limited to the wealthy, state-backed terrorist organizations but is now increasingly open to small, relatively unsophisticated groups of fanatical true believers in whatever cause they espouse.¹²

Although little known, the threat of domestic, homegrown terrorism dealing in WMD has been present in the United States for some time, as evidenced by the 1972 thwarting of an attempt by an American fascist group called the Order of the Rising Sun. This group had planned to dump eighty pounds of typhoid bacteria cultures into the water supplies of a few large Midwestern cities.

Likewise, in 1985, a group of neo-nazis was stopped from dumping thirty gallons of cyanide into the water supplies of New York City and Washington, DC.¹³ The potential numbers of casualties which could have resulted from these two attacks, as unthinkable as they are, serve to highlight the potential threat associated with increased access to WMD.

Access to these weapons has been increased largely due to the breakup of the FSU and the resulting sale of weapons of every type.¹⁴ Although some would discount the market for sales of weapons--usable fissile material, research into the security of fissile material holding sites (in Russia) has shown a total lack of awareness of modern nuclear security and accountability procedures.¹⁵ The relative ease of access to WMD is no longer in doubt; the remaining question is when, not if, they will be sold to an unfriendly state or nonstate actor.

Another great fallacy which has long downplayed the possibility of sale and transport of WMD is the danger of handling nuclear fissile material; both highly enriched uranium (HEU) and plutonium can be easily handled with little threat of immediate danger to the smuggler (if basic precautions are met).¹⁶ The ease of handling, coupled with the reduced size of these weapons, makes them relatively safe and easy to transport, conceal, and deliver to potential buyers. If not already established, the eventual creation and exploitation of the market for WMD is certain.¹⁷ Although this section dealt mainly with the potential availability of nuclear weapons--usable fissile material, the availability of chemical and biological weapons, or the means to make them, is even greater.

The breakup of the FSU has not only resulted in the potential creation of an open market for the sale of WMD, but has also resulted in an increased availability of the technicians and scientists necessary to produce and maintain these weapons.¹⁸ These highly skilled technicians and extremely competent scientists, who spent their careers working on the perfection of these terrible weapons, suddenly found themselves either out of work, or unpaid for extended periods. Life for

these once-heroes of the Soviet Union underwent a drastic change once the communist system collapsed. In a very short period of time, they saw their status, their income, and quality of life deteriorate substantially through no fault of their own. These highly skilled scientists and technicians, without real options, might find irresistible the opportunity for the immediate financial reward potentially available through the sale of weapons, technology, or skills.¹⁹

The enormity of the threat offered by groups or organizations willing to kill en masse to further their aims has been brought to the US national attention several times in the recent past. The first of these “wake-up calls” was the bombing of the New York World Trade Center in February 1993. The small group of Muslim conspirators who conducted the bombing forever shattered the perception of domestic immunity to terrorism. This horrific indoctrination into the realities of terrorism resulted in six deaths, more than a thousand injuries and several hundred million dollars of damage. However terrible these figures seem, had the bomb been more “successful,” had it gone off as intended and undermined the structure of the building, more than 30,000 people could have lost their lives and the US economic system would have been immeasurably damaged.²⁰ This bombing had the, even more chilling effect of breaking the psychological barrier which protected the US from the ravages of large-scale terrorism.

Four months following the World Trade Center Bombing, nine Islamic fundamentalists, in an attempt to free the suspects of the Trade Center Bombing, were charged with conspiring to conduct a series of terrorist acts including the simultaneous bombing of the Lincoln and Holland Tunnels and the George Washington Bridge, with thousands of commuters as potential targets. Included in this simultaneous attack were a car-bomb attack of the United Nations Building; an assault of the FBI New York Headquarters; and the assassinations of the General Secretary of the United Nations, the Egyptian president, a New York senator, and a Brooklyn assemblyman.²¹ Clearly, America is no longer free from the specter of large-scale terrorism within her own borders.

Another, even more fear inspiring, event occurred in Tokyo, Japan, in March 1995 when five chemical devices disguised as lunch boxes and soft-drink containers began releasing a nerve agent (sarin) inside subway cars filled with commuters. This attack, conducted by a Japanese religious cult (Aum Shinrikyo) resulted in 10 deaths and over 5,000 injuries. The relatively low casualty rate of this attack was attributed to three factors: (1) three of the five devices were discovered prior to ignition, (2) there is cause to believe the lethal nerve agent (sarin) had become impure, and (3) the possibility that the sect diluted the sarin to make it safer for the terrorists.²²

Despite the few casualties, this attack made it extremely clear that the willingness to kill large numbers of innocent people was not restricted to middle-eastern religious sects.²³ Evidence also suggests that the cult Aum Shinrikyo was, at the time of the subway attack, also developing biological weapons.²⁴ This first, well-known use of chemical weapons (and planned use of biological agents) against civilians in a terrorist scenario is considered by many to have broken the “psychological barrier” prohibiting their use in such scenarios and is now seen as the harbinger of future attacks utilizing these terrible weapons.²⁵

The most recent example of international terrorist activity directed against the US was the bombing of the Khobar Towers residential apartment building located near the King Abdul Aziz Air Base in Dhahran, Saudi Arabia, on 25 June 1996. This attack, which killed nineteen Americans and wounded dozens more, was yet another example of the vulnerability of US overseas interests and of the ease with which terrorists can garner attention for their cause. One only has to remember the 1983 Beirut Bombing which resulted in a complete pullout of US forces from Lebanon to gain an insight into the possible motivation and intent of these particular terrorists. As the US will continue to play the dominant role in world affairs for the foreseeable future, the likelihood of future attacks is more a matter of when and where than of “if.”

The final and most shocking example of the current threat was the Oklahoma City bombing of 19 April 1995, when over 2,000 pounds of ammonium nitrate, fuel oil, detonation cord, and time fuse blew up the Oklahoma City Federal Building causing the deaths of 169 people; nineteen of those casualties were children in a day care center located inside the building. This bombing was an attack on the heartland of America; the most chilling aspect of this crime was that the most probable suspects are Americans.

The American public associates terrorism with middle-eastern religious extremists; however, the attack on the Oklahoma City Federal Building represents the brewing potential for domestic terrorism from within the US. Dissatisfaction with government and law enforcement policies has resulted in the growth of numerous militia and ultra-extremist organizations scattered throughout the country. There are at least 809 Patriot groups (an underground paramilitary/militia organization) and another 441 armed militias operating nationwide with a total estimated population as high as 12 million.²⁶

Although the incidents described above were isolated, and fortunately, caused the death of relatively few, imagine the effect if any one of these events had involved the use of a nuclear weapon or had been intended to produce mass casualties. It is clear by these examples that the US is not immune from such attacks and that the evidence suggests that the likelihood of future attacks will increase over time.

A major threat, often overlooked, is the coupling of conventional explosives with radioactive material, producing a radioactive dispersal device (RDD). Such a device can kill large numbers of people and render huge areas uninhabitable for extremely long periods. This specific threat is discussed in chapter four of this thesis.

In a bipolar world with only a few nations possessing WMD, the threat of mutual retaliation and the promise of mutually assured destruction (MAD) deterred nations from

employing these terrible weapons. Today, nonstate actors, with no geographical boundaries, are in possession of WMD or the means to acquire them. As these groups are not geographically oriented but exist in pockets throughout the world, without clear economic or political ties to any nation state, the threat of retaliation in kind is no longer an effective deterrent. New measures to deter, counter, and prevent the use of these weapons must be developed.²⁷

Although these nonstate actors and terrorists are thought to have no ties with any state entity, imagine the convenience and protection (plausible deniability) offered to an enemy of the US if he could direct one of these supposedly independent groups to attack the US, overseas or domestically, with WMD. The promise of US retaliation would have no target; leaving the sponsor hiding behind the independence of the terrorist organization while still inflicting great damage to the US.²⁸

The threat posed by terrorists groups armed with WMD is real and sobering. Robert Kupperman, a terrorism expert at Washington's Center for Strategic and International Studies, summarized the threat posed by WMD in the hands of nonstate actors, when he said, "Nightmares are coming true. I think we're in for deep trouble."²⁹

These threats to national security have not gone unnoticed by the US government. In November 1994, President Clinton declared a "national emergency with respect to the unusual and extraordinary threat to the national security, foreign policy, and the economy of the United States posed by the proliferation of nuclear, biological, and chemical weapons (WMD) and the means of delivering them."³⁰ In November of 1995 and 1996, the President "continued" this national emergency declaration.³¹

This national concern has been voiced and focused in the *A National Security Strategy of Engagement and Enlargement* of February 1996 and the Department of Defense (DOD) publication entitled *Proliferation: Threat and Response* of April 1996. These documents echo the

national concern regarding WMD in the hands of nonstate actors and task the DOD with countering this threat (the specific roles of governmental agencies will be discussed in detail in chapter 5 of this thesis).

President Clinton identified countering the proliferation of WMD as one of his strategic goals.³² In turn, the *National Military Strategy of the United States of America* identified counterterrorism and countering the proliferation of WMD as primary objectives.³³ These directives were encapsulated in the Secretary of Defense document *Proliferation: Threat and Response* of April 1996, in which the threat of terrorists employing WMD was recognized and the details concerning the available technology and military significance of nuclear, biological and chemical weapons were provided. Included in this report was the tasking of each regional Commander in Chief (CINC) with responsibility for counterproliferation and counterforce operations within their designated geographic areas of responsibility. Further, this report stated that the DOD is actively pursuing measures to counter paramilitary, covert, and terrorists threats utilizing WMD by employing reinforced Special Operations Forces (SOF) assets.³⁴

The threats posed by nonstate actors armed with WMD and possessing the willingness to use them poses new and difficult challenges to the United States of America. The old rules of mutually assured destruction and assured retaliation no longer apply. This new threat must be countered by an organized, flexible, multiagency force capable of synchronizing the efforts of all participants. This paper will endeavor to define the phases of the counterproliferation continuum and identify the governmental organizations and agencies currently involved in the counterproliferation effort and determine their roles throughout the process.

Operational Definitions

The definitions listed below are derived from a variety of sources. The primary source of these terms was Joint Publication 1-02, the Department of Defense *Dictionary of Military and Associated Terms*, (Washington, DC: Chairman of the Joint Chiefs of Staff, 23 March 1994). In instances where a definition was not taken from this publication, an annotation will follow the definition clarifying the source.

Antiterrorism: Defensive measures taken to reduce vulnerability to terrorist acts.

Attack: A segment of the Counterproliferation Continuum. Any hostile offensive action. For the purposes of this paper, “attack” entails actions taken to prevent detonation or release of nuclear, chemical or biological agents. These actions include arrest, detainment, containment, offensive action, and direct action. (Author definition)

Combating Terrorism: Actions, including antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures taken to prevent, deter, and respond to terrorism) taken to oppose terrorism throughout the entire threat spectrum.

Consequence Management: A segment of the Counterproliferation Continuum. Both emergent and long term response to the detonation or introduction of a weapon of mass destruction. (Author definition).

Counterforce: Measures taken to target, plan attacks, seize, disable, destroy, disrupt, interdict, neutralize, or otherwise deny the use of NBC weapons, their launch platforms, command and control (C2) structure, logistics structure, reconnaissance and surveillance, and target acquisition means. (Author definition)

Counterproliferation: A national strategy based on the assumption that proliferation of WMD has occurred and must be countered. This strategy has four objectives: (1) prevent further proliferation of WMD, (2) rollback proliferation where it has occurred, (3) dissuade and deter use

of WMD and delivery systems, and (4) adapt US forces and assets to respond to WMD in both conventional warfare and counterterrorism arenas. Note that the strategy of counterproliferation has seemed to eclipse the strategy of nonproliferation which has as its goal to prevent any proliferation of WMD. (Author definition based on objectives of DOD Counterproliferation Initiative)

Counterterrorism (CT): Offensive measures taken to prevent, deter, and respond to terrorism.

Crisis Response: A segment of the Counterproliferation Continuum. Those measures taken in response to a threat of terrorist detonation of a weapon of mass destruction; includes all actions taken to prevent, or prepare for the detonation or release of nuclear, biological or chemical agents. (Author definition)

Defense: A segment of the Counterproliferation Continuum. Defense is the capability of resisting attack; practice or manner of self-protection; means or method of defending; defensive plan, policy or structure. For the purposes of this paper, defense entails all measures taken, both active and passive, to prevent, or limit the effectiveness of WMD. (Author definition)

Deterrence: A segment of the Counterproliferation Continuum. The prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.

Dissuasion: A segment of the Counterproliferation Continuum. To divert by advice or persuasion: turn from something by reasoning. Additionally, for the purposes of this paper, dissuasion includes those measures taken to persuade nonstate actors to not utilize WMD and to not provide production support or the weapons themselves. (Author definition)

Intelligence: A segment of the Counterproliferation Continuum. According to United States Code, intelligence includes foreign intelligence and counterintelligence. Foreign intelligence

is defined as information relating to the capabilities, intentions, or activities of foreign governments or elements thereof, foreign organizations, or foreign persons. Counterintelligence is defined as information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or assassinations conducted by or on behalf of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities.

Law Enforcement Agencies (LEAs): Organizations whose primary mission is to enforce the “law of the land.” LEAs sometimes operate independently of other organizations whose mission is largely limited to intelligence collection. In this paper, this term will largely apply to local LEAs such as state, county and city police forces as well as the Federal Bureau of Investigation (FBI) and the Drug Enforcement Agency (DEA). (Author definition)

Mega-terrorism: Terrorism conducted with intent to inflict large-scale loss of life and destruction. (Author definition)

Nonproliferation: A national strategy based on assumption that proliferation of WMD has been, and can be prevented. This strategy has one objective: prevent the proliferation of WMD. Note that this strategy is encompassed in the strategy of counterproliferation. This strategy seems to be giving way to counterproliferation as it becomes readily apparent that proliferation of WMD has, and will continue to occur. (Author definition)

Nonstate Actors: Groups, organizations or individuals who have no clear geographical, political, or economic ties to any nation state, but who clearly intend to inflict their opinions, ideals, and requirements on others through intimidation, terrorism or the threat of death or destruction. This term encompasses terrorists. (Author definition)

Prevention: A segment of the Counterproliferation Continuum. Measures taken by the public and private sectors to prevent the proliferation of WMD (including related technology and

expertise necessary to produce and deliver them) among nonstate actors and nation states alike.

(Authors definition)

Radiological Dispersal Device (RDD): A device designed and employed to disperse radioactive materials, through both conventional and unconventional means, with the intent to injure, kill, or render substantial areas unusable. (Author definition)

Reduction: A segment of the Counterproliferation Continuum; reduction is the voluntary decrease of arsenals of WMD in compliance with treaty obligations, regimes or accomplished through the use of sanctions or other pressures to force reduction of weapons through non-violent means. (Not listed in Joint Publication 1-02 in this general a context; authors definition utilized)

Retaliation: A segment of the Counterproliferation Continuum, retaliation is to return like for like, to return evil for evil. For the purposes of this paper, retaliation includes all offensive actions taken in response to the use of WMD against the United States or her interests. (Author definition)

Special Operations: Operations conducted by specially organized, trained, and equipped military and paramilitary forces to achieve military, political, economic, or psychological objectives by unconventional military means in hostile, denied, or politically sensitive areas. These operations are conducted during peacetime competition, conflict, and war, independently or in coordination with operations of conventional, non-SOFs. Political-military considerations frequently shape special operations, requiring clandestine, covert, or low visibility techniques and oversight at the national level. Special operations differ from conventional operations in degree of physical and political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets.

Special Operations Forces (SOF): Those active and reserve component forces of the military services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations.

Terrorism: The unlawful use or threatened use of force or violence against individuals or property to coerce or intimidate governments or societies, often to achieve political, religious, or ideological objectives. See also antiterrorism, combating terrorism, and counterterrorism.

Weapons of Mass Destruction (WMD): Any weapon or device that is intended, or has the capability, to cause death or serious bodily injury to a significant number of people through the release, dissemination, or impact of: (a) toxic or poisonous chemicals or their precursors; (b) a disease organism; or (c) radiation or radioactivity.³⁵ Weapons that utilize the inherent deadly qualities of nuclear, chemical, or biological materials and agents to kill, injure personnel or damage property. This definition includes the detonation of a nuclear weapon or the intended dispersal of radioactive material, through conventional means to kill personnel or deny use of an area. (Author definition)

Delimitations

To ensure this study maintained its relevancy, the majority of research has been limited to the period following the collapse of the Soviet Union.

Significance of the Study

The author intends to contribute to the body of knowledge necessary to combat the threats discussed in this thesis. Clearly, the threat to national security posed by unfriendly entities, undeterred by threats of retaliation, wielding WMD and possessing the will to use them for political, economic, or religious reasons represents a clear and present danger to the US. This study, by defining the Counterproliferation Continuum has illustrated the inescapable linkage

between counterproliferation and counterterrorism. The major finding of this paper has been the "less than optimum" organizational and C2 structure governing and attempting to link US counterproliferation and counterterrorism efforts. Finally, recommendations are offered to restructure national C2 of these two efforts.

The Research Topic

The initial topic of this study was chosen by the author from a list of suggested topics offered by the Special Operations Division of the Joint Staff. It reached its current form following discussions with Colonel J.B. Jones, Chief, Special Operations Division of the Joint Staff, and the authors research committee.

The relevance of the topic is clear. The threat posed by the proliferation of WMD among nonstate actors and the apparent lack of a simple, coherent interagency strategy designed to counter this threat is the single greatest danger to US national security. The major research problem encountered thus far is the lack of published material specifically dealing with the subject matter. To date, there is no classified or unclassified document which clearly spells out the roles of the separate governmental agencies throughout each phase of the continuum meant to counter this threat. In fact, the phases of the continuum itself have only now been defined in this thesis. While there are numerous works outlining the threat and many governmental policy publications concerning countering the proliferation of WMD, there is none that completely describes how the governmental agencies will interact to counter this threat.

The Research Design

The nature of the topic required extensive background reading on the threat, the governmental policies dealing with the threat, and the roles of the separate governmental agencies. It is this last area that has presented the greatest research problem; it has proven extremely difficult

to acquire information on the roles of the many separate governmental agencies that participated in the counterproliferation process. Accordingly, determining which agency has the lead during each phase of the Counterproliferation Continuum has been decidedly difficult, perhaps proving to be one of the more noteworthy findings of this work.

In addition to background reading, the author has traveled to the Pentagon and conferred with the Special Operations Division of the Joint Staff and enlisted their aid in gathering research material, opening doors, and providing an insider's perspective on the counterproliferation process. Although limited, their assistance, especially in the early stages of this research project, proved invaluable.

The single greatest source of information concerning this topic has been the Internet. This medium has proven invaluable in accessing government on-line sites providing timely information on national and world events. Likewise, the Internet has provided a window into the offices of the numerous organizations, foundations, and concerned individuals that are committed to ensuring the threat of megaterrorism is never realized.

¹Senators Sam Nunn, Richard Lugar, (unk) Domenici, (unk) Graham, (unk) Lieberman, and Arland Specter. *Proposed Amendment NO. 4349 to the Constitution of the United States* (Washington, DC: United States Senate, 26 June 1996). Section 1302. Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>.

²William J. Clinton, *National Security Strategy of Engagement and Enlargement* (Washington, DC: US Government Printing Office, 1996), i.

³Yossef Bodansky, *Target America: Terrorism in the U.S. Today* (New York: S.P.I. Books, 1993), xiii and 1,2.

⁴Graham T. Allison, Owen R. Cote Jr., Richard A. Falkenrath, and Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge: MIT Press, 1995), 61-62.

⁵Ibid., 62.

⁶Ibid., 23.

⁷William J. Clinton, President of the United States, letter to the Speaker of the House of Representatives and the President of the Senate concerning the proliferation of WMD (the White House, 12 November 1996).

⁸104th Congress, "National Defense Authorization Act, Title XIV: Defense Against Weapons of Mass Destruction," *U.S. Code, Congressional and Administrative News*, (St. Paul, MN: West Publishing Company, No. 9, November 1996), Section 1403.

⁹Steven Sloan, "Terrorism: How Vulnerable is the United States?" in *Terrorism: National Security Policy and the Home Front*. (Carlisle Barracks, Pennsylvania: The Strategic Studies Institute of the US Army War College, May 1995).

¹⁰Senators Sam Nunn, Richard Lugar, (unk) Domenici, (unk) Graham, (unk) Lieberman, and Arland Specter. *Proposed Amendment NO. 4349 to the Constitution of the United States* (Washington, DC: United States Senate, 26 June 1996). Section 1302. Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>.

¹¹Bruce Hoffman, *Responding to Terrorism Across the Technological Spectrum*, (Carlisle Barracks, Pennsylvania: US Army War College, July 1994).

¹²Bruce W. Nelan, "The Price of Fanaticism," *Time*, 3 April 1995, 39.

¹³Ibid., 41.

¹⁴Senators Sam Nunn, Richard Lugar, (unk) Domenici, (unk) Graham, (unk) Lieberman, and Arland Specter. *Proposed Amendment NO. 4349 to the Constitution of the United States* (Washington, DC: United States Senate, 26 June 1996). Section 1302. Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>.

¹⁵Graham T. Allison, Owen R. Cote Jr., Richard A. Falkenrath, Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge: MIT Press, 1995), 43-45.

¹⁶John McPhee, *The Curve of Binding Energy*. (New York: Farrar, Strause, and Giroux, 1974), chapter 2.

¹⁷Graham T. Allison; Owen R. Cote Jr.; Richard A. Falkenrath; Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge: MIT Press, 1995), 43-45.

¹⁸Graham T. Allison; Owen R. Cote Jr.; Richard A. Falkenrath; Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge: MIT Press, 1995), 61-62.

¹⁹Ibid., 28-30.

²⁰Ibid., Acknowledgments.

²¹Hoffman, 480.

²²“A Cloud of Terror—And Suspicion,” *Newsweek*, 3 April 1995, 36.

²³Ibid.

²⁴Mari Yamaguichi, “Japan Sect Showed Doomsday Interest in the Ebola Virus” *San Francisco Examiner*, 24 May 1995.

²⁵Nelan, 41.

²⁶Douglas D. Bodrero, “Changing the Mindset on Anti-Terrorism—A Police Perspective” (speech presented to the DOD Terrorism Conference, Ft. Walton Beach, FL, September 1996).

²⁷U.S. Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington, DC: April 1996), p iii.

²⁸Ibid.

²⁹Nelan, 38-41.

³⁰William J. Clinton, *Message to the Congress on the Proliferation of Weapons of Mass Destruction*, 16 February 1995.

³¹William J. Clinton, President of the United States, letter to the Speaker of the House of Representatives and the President of the Senate concerning the proliferation of WMD (the White House, 12 November 1996).

³²William J. Clinton, *National Security Strategy of Engagement and Enlargement*, (Washington, DC, 1996), 19-20, 25.

³³U.S. Department of Defense. *National Military Strategy of the United States of America 1995* (Strategy paper by the Chairman of the Joint Chiefs of Staff, General John M. Shalikashvili, Washington, DC, 1995), 4, 9, 10, 15.

³⁴U.S. Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington, DC, April 1996), A1-A-6.

³⁵104th Congress, National Defense Authorization Act, Title XIV: Defense Against Weapons of Mass Destruction, *U.S. Code, Congressional and Administrative News*, (St. Paul, MN: West Publishing Company, No. 9, November 1996), Section 1403.

CHAPTER 2

REVIEW OF LITERATURE

There are countless books, articles, and periodicals dealing with the threat associated with the proliferation of WMD, and many more on the generic threats posed by terrorist groups; few, however, have connected the two aspects of this threat. Also, basically unwritten are the roles of the separate governmental agencies in countering the proliferation of WMD among nonstate actors. Likewise absent is a summation of the Counterproliferation Continuum, in fact, there has been no mention of the “process” of counterproliferation.

To date, only three theses have been found dealing with any aspect of counterforce or counterproliferation issues. One of these is an unclassified study of special operations forces (SOF) and their role in attacking theater missiles. Although well written, this paper provides little detail useful in this study. The second, a classified paper, is very specific in its scope and does little to lay the foundation for future research. The third addresses a specific extremist religious group and attempts to determine if this group would utilize nuclear weapons to further their cause.

There are numerous governmental publications outlining current governmental policy concerning this threat and the roles of a few agencies (DOD, Central Intelligence Agency, and the Justice Department) have in countering it. Although these publications are numerous, none specify roles and responsibilities throughout the Counterproliferation Continuum. Additionally, there are classified sources (Contingency Plans) which offer some degree of detail but concentrate on mainly DOD-specific roles.

The author would be remiss if the value of the information gleaned from the Internet was not mentioned. The Internet was invaluable in providing timely information on developments in the fields of counterproliferation, nonproliferation, terrorism, counterterrorism, and WMD. More than one hundred articles, papers, and other sources were acquired through various web sites. Moreover, US government publications are available on-line as is the Congressional Record, also an outstanding source of information.

This chapter will address the literature, under a few general headings, as it was utilized in the writing of this paper. The general headings are as follows: (1) Threat and Threat Awareness, (2) National Policies Regarding WMD and Terrorism, and (3) Defining the Counterproliferation Continuum. Each of these general headings will be further broken down into: (1) Government Publications, (2) Books, (3) Periodicals (newspaper, magazine, and journal articles), and (4) Other (speeches, research papers, special reports, and information from the Internet, etc.).

Threat and Threat Awareness

Awareness of the threat associated with WMD in the hands of nonstate actors (terrorists) has been documented in many periodicals, government publications (The Congressional Record and Presidential policy statements), and in numerous books as well as research papers, speeches, and theses.

Government Publications

Presidential Executive Orders. Executive Order 12398 dated 14 November 1994 contained the following: "I, William J. Clinton, President of the United States, find that the proliferation of nuclear, biological and chemical weapons (weapons of mass destruction) and the means of delivering such weapons, constitutes an unusual and extraordinary threat to the national security, foreign policy and economy of the United States, and hereby declare a national emergency

to deal with that threat.” This declaration of a national emergency was extended by Executive Order on 15 November 1995 and again on 14 November 1996.¹

Congressional Records. Due to the relatively, recent awareness of the threat posed by WMD in the hands of nonstate actors (terrorists), the most detailed information has been contained in reports of congressional hearings. Terrorism and the potential use of WMD has been a matter of congressional interest since the breakup of the former Soviet Union. These reports offer consolidated, factual, and detailed information on the history, threat, and problems associated with the subject threat.

On 31 October and 1 November 1995, a hearing was conducted before the Permanent Subcommittee on Governmental Affairs of the United States Senate on the *Global Proliferation of Weapons of Mass Destruction*. This hearing discussed in detail the threat of chemical and biological agents via a thorough review of the Tokyo subway gas attack of 20 March 1995.² This terrorist attack was conducted by the religious cult Aum Shinrikyo Nun. This hearing, in addition to studying the Aum terrorist attack, noted the implications this event had for the national security of the United States.

During this hearing, testimony was given regarding the Tokyo incident. Additional testimony dealt with the generic threat associated with chemical and biological agents, their availability through the black market or through a state-sponsor, the relative ease of producing these agents, and the great difficulty in detecting them. This hearing clearly spelled out the threat but provided no countersolutions.³

During 13-17 March 1996, another Senate hearing was conducted on the *Global Proliferation of Weapons of Mass Destruction*. The majority of this hearing focused on the threat of nuclear proliferation and the availability of nuclear fissile materials from the former Soviet Union and the equally dangerous threat posed by the “brain drain” of former Soviet scientists and

technicians out of work and their potential employment by nation-states or nonstate actors. In the closing days of this hearing, the committee discussed recommendations to counter the threat posed by the proliferation of WMD and their use by nonstate actors (terrorists). This hearing also defined some responsibilities of the DOD, the Department of Energy and the Central Intelligence Agency in countering this threat.⁴

Government Policy and Doctrine. The President in his *National Security Strategy of Engagement and Enlargement of 1996* identified the counterproliferation of WMD as one of his strategic goals.⁵ The Secretary of Defense, in his document *Proliferation: Threat and Response* of April 1996 echoed this general concern and specifically identified the threat of WMD in the hands of terrorists to be of major concern. This publication also tasked the regional CINCs with the responsibility for counterproliferation and counterforce operations within their assigned geographic areas of responsibility.⁶ *The National Military Strategy of the United States of America*, written by the Chairman of the Joint Chiefs of Staff and published in 1995, identified counterterrorism and counterproliferation of WMD as primary objectives.⁷

Books

Numerous books exist identifying the threat. Although potentially dated (published in 1974), *The Curve of Binding Energy* by John McPhee gives a detailed understanding of the threat associated with fissile material and the potential danger resulting from inadequate security of nuclear materials. This book, the record of a series of interviews with Theodore (Ted) Taylor, a scientist who was part of the United States nuclear weapons programs in the 1950s and 60s, also conceptually outlines the technical process of handling fissile material and the production of nuclear weapons. This book addresses the potential danger of nuclear material and makes it clear that the process of making a nuclear weapon, although technically complex, is clearly possible.

The potential of nuclear material leakage from the former Soviet Union clearly simplifies the nuclear weapons production process.⁸ *Avoiding Nuclear Anarchy*, by Allison, Cote, Falkenrath, and Miller identifies the potential “leakage” of nuclear materials from the FSU and the “brain drain” of former Soviet scientists and technicians who are, at a minimum, underemployed. These highly educated and trained scientists and technicians could be of substantial assistance to a state or organization wishing to create a nuclear weapon. The authors recommend shutting down the source of nuclear materials as the most effective means of dealing with this threat.⁹

Origins of Terrorism: Psychologies, Ideologies, Theologies, States of Mind, edited by Walter Reich, provides a look into the minds of terrorists, their backgrounds, motivations, and potential for utilizing WMD as weapons of terror.¹⁰

Although published in 1987, *Holy Terror*, by Amir Taheri provides an insight into the motivation, training, ideology, and potential threat to the United States by Islamic fundamentalist groups.¹¹ *Target America*, by Yossef Bodansky, clearly identifies the increasing threat of terrorism to the United States and makes a strong case why it is only a matter of time before the next terrorist attack on the United States occurs.¹²

Periodicals

Numerous articles have been written outlining the threat in newspapers, magazines, and journals. These articles range from the very informative to the sensational. Because of the large number of articles on the subject, only a few which provided sufficient detail of specific incidents, weapons, or threat groups were utilized in this paper.

The Price of Fanaticism, written by Bruce Nelan, describes the Tokyo subway gas attack and identified it as a threshold over which terrorism has crossed: the threshold being the use of WMD on an unwitting and innocent populous. Additionally, he provided a description of the most

likely groups to pose a threat, both internationally and domestically. This article also provided a brief overview on the lethality of chemical and biological weapons.¹³ In her article *Japan Sect Showed Doomsday Interest in the Ebola Virus*, Mari Yamaguchi reported that the Aum Shinrikyo, the sect that conducted the sarin gas attack in the Tokyo subway, had also researched the use of biological weapons, reaffirming the enormity and diversity of the threat of WMD in the hands of terrorists or religious extremists.¹⁴

Robert Kupperman in his article *A Dangerous Future* briefly summarized the history of domestic terrorism and stated that state-sponsored terrorism is still alive and that the Tokyo subway gas attack is a herald for future use of WMD as a terrorist weapon within the US.¹⁵ The ultimate fear of everyone aware of this threat was described by Robert Wright in his article *Be Very Afraid*. Mr. Wright painted a very disturbing picture of the threat of terrorists armed with WMD and the status of treaties regarding WMD which could have an effect on the proliferation of these weapons.¹⁶

The question of nuclear terrorism as a real threat is still being debated. In Gavin Cameron's article *Nuclear Terrorism: A Real Threat?* he outlined the security issues surrounding nuclear material in the former Soviet Union and although he acknowledges that there is a security problem, he questions the existence of a nuclear black market. Additionally, he questions the use of nuclear weapons as a terrorist weapon of choice. In support of this view, Mr. Cameron points out the very chilling effects of the World Trade Center and the Oklahoma City bombings, both nonnuclear bombs. Mr. Cameron postulated that the costs, bother, and threats to the terrorist outweigh the potential benefits from using nuclear weapons. Finally, he ends the article by saying that the Tokyo subway attack broke a psychological taboo (barrier) concerning the use of WMD in a terrorist scenario and that the likelihood of future, similar attacks is great.¹⁷

Jane's Defense Weekly has been a source of very valuable, detailed information on the threat and current countermeasures. In addition to the Cameron article mentioned above, Barbara Starr wrote *Chemical and Biological Terrorism*, which outlines the threat of WMD in the hands of terrorists and the governmental assets, organizations, and agencies tasked to deal with these threats.¹⁸ An in-depth look inside the Hezbollah organization and the potential threat it poses was provided by Carl Anthony Wege in his article, *Hezbollah Organization*.¹⁹

Other

Numerous sources other than those mentioned above provided information regarding the potential threat of large-scale terrorism employed against the US. These sources include special reports, speeches, papers, theses, and nonpublished works; many garnered from the Internet. These sources are discussed below.

The availability of nuclear materials on the global black market is detailed in the Center for Strategic and International Studies Report, *The Nuclear Black Market*. This special report details the extent of the problem of proliferation of WMD and offers solutions and recommendations to stop the potential flow of nuclear material from the former Soviet Union.²⁰ Another outstanding source of information concerning the threat, current countermeasures and recommended improvements is a White Paper written by the Defense Group, Incorporated, for the Office of the Secretary of Defense (Atomic Energy) titled *Countering Proliferation: A National Emergency*.²¹

A speech given by Dr. John M. Deutch, Director of the Central Intelligence Agency (CIA) outlined the details of the Tokyo subway gas attack which pointed attention to the speed with which a group can obtain the capability to launch an attack utilizing WMD. Dr. Deutch went on to give a brief summary of the nuclear weapons status of specific countries around the globe and

summarized with a brief statement of the close coordination the CIA has built with other agencies and the military in countering this threat.²²

D. Douglas Bodrero, the Commissioner of Public Safety for the state of Utah, gave a speech to the DOD Terrorism Conference during the week of 10 September 1996 titled, *Changing the Mindset on Antiterrorism—A Police Perspective*. Mr. Brodero outlined the domestic terrorist situation outlining the numbers of potentially dangerous groups, their status and the “near misses” which have occurred during the last few years. These “near misses” included several instances of domestic terrorism involving the use of WMD.²³

Bruce Hoffman wrote a brief for the US Army War College titled *Responding to Terrorism Across the Technological Spectrum*, which outlined the traditional weapons of the terrorist and how those weapons are evolving. Mr. Hoffman clearly sees the aims and weapons of the terrorist as changing from the car bomb and pistol (intended to kill relatively few), to utilizing WMD to produce mass casualties.²⁴

Stephen Sloan, in his article *Terrorism: How Vulnerable is the United States?*, highlighted the potential for terrorism in the US by looking at how national policy could be affected through the use of terrorist acts, specifically recalling the almost immediate change in US foreign policy as a result of the bombing of the Marine barracks in Beirut in 1983.²⁵

In Theodore R. Hanley’s master’s thesis, “Hamas: Will a Nuclear Weapon be in it’s Arsenal?” the author analyzes the threat posed by Hamas, an extremist Islamic sect and determines their use of WMD is a possibility.²⁶

Gleaned from the Internet, a speech by the Coordinator for Counterterrorism, Philip C. Wilcox, Jr., to the Denver Council on Foreign Relations on 12 September 1996 points out the relatively few casualties resulting from terrorism and the inordinate and paradoxical fixation on this threat by the US public. He also describes the threat in general terms of international terrorism

and describes US policy in dealing with terrorism and the role of the State Department in this effort.

In an address titled, "Fighting Terrorism: Challenges for the Peacemakers," given to the Washington Institute for Near East Policy Annual Soref Symposium, former Secretary of State Warren Christopher amplified the subject threat and gave insight into state-sponsored terrorism intent to disrupt the Israeli-Palestinian peace process.

"The Emerging Threat Posed by Non-State Proliferation," written by James K. Campbell discusses the evolution of terrorism or in his words, "The Revolution in Terrorist Affairs." Campbell notes the emergence of the ultra-violent act followed by silence as opposed to the need for claiming responsibility as evidence of the evolution of the terrorist or nonstate actor as a major threat.

The Nixon Center for Peace and Freedom sponsored a study group which produced a "Seminar on Megaterrorism." This seminar identified acts of megaterrorism as "continuation of war by other means." This seminar also identified the lack of synchronization by the separate governmental agencies in countering this threat. This study also touched on a new form of terrorism: "cyberterror." This insight highlighted the potential for terrorism within the Internet, attacking the current, western information-driven economic and social structures.

Research into terrorist organization and motivation was assisted by the following works: "The Lethal Triad: Understanding the Nature of Isolated Extremist Groups," by Kevin M. Gilmartin, Ph.D.; "The Changing Face of Middle Eastern Terrorism," by James Phillips; "Hizbollah Organization," by Carl Anthony Wege; "The Dark Side of Islam," by Bruce Nelan; and "Hamas: Will a Nuclear Weapon be in its Arsenal?," a thesis by Theodore R. Hanley. These works, all available through the Internet, provided clarity and insight into the complex world of

current international terrorism. These articles all reinforced the seriousness of the threat and the willingness of nonstate actors to utilize WMD to further their aims.

Information regarding specific threats posed by nuclear weapons was provided by the following works: "When Terrorists Go Nuclear," by David Hughes, published in the January 1996 issue of *Popular Mechanics*; "Nuclear Accidents Waiting to Happen," by Frank Barnaby, published in the April 1996 of *The World Today*; "Nuclear Terrorism: A Real Threat?," by Gavin Cameron, published in the September 1996 issue of *Jane's Intelligence Review*; "Nuclear Smuggling: How Serious a Threat?," by James L. Ford published by the National Defense University's, *Strategic Forum*; and "Nuclear Threats From Small States," by Jerome H. Kahan. These works, collectively, provided general and specific information regarding the ease of acquisition, transport and employment of nuclear weapons against the US.

Information on the threat of chemical agents employed by terrorists was gleaned from the following works: "The CWC Chronicle," published by the Henry L. Stimson Center via the Internet; "Chemical and Biological Terrorism," published in the 14 August 1996 edition of *Jane's Defense Weekly*; and an Internet news advisory from the Henry L. Stimson Center titled, "First Anniversary of Tokyo Subway Poison Gas Attack: Is the US Prepared For a Similar Attack?"

Information concerning the threat of biological agents was provided by "Plagues in the Making," by Christopher Dickey (published in the 9 October, 1995 issue of *Newsweek*, available via the Internet). Additional information was provided in an anthology titled, *The Battlefield of the Future* in which LtCol Terry N. Mayer (USAF) wrote, "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction," and LtCol Robert P. Kadlec (USAF) wrote, "Biological Weapons for Waging Economic Warfare." Another work in this area which provided insight into the enormity of the threat posed by biological weapons is "The Specter of Biological Weapons" by

Leonard A. Cole, published in the December 1996 issue of *Scientific American*. These works provided detail and sometimes graphic descriptions of the threat posed by biological agents.

National Policies Regarding the Use of WMD by Nonstate Actors (Terrorists)

Unlike the general awareness of the threat posed by WMD in the hands of nonstate actors, which is written about extensively, actual national policy regarding the countering of this threat is found in few places. Aside from the general declarations of intent to prevent the use of WMD by nonstate actors already discussed in this paper, there has been little published in the way of policy dealing with the details of just how the government will act to reduce or eliminate the threat posed by nonstate actors (terrorists) armed with WMD. Even more specific government reports, such as the *Report on Activities and Programs for Countering Proliferation* of May 1996, only marginally address this specific threat.

Government Publications

Presidential Executive Orders. As stated earlier, Executive Order 12398 dated November 14, 1994 declared a national emergency concerning the threat posed by WMD. This declaration has been extended twice, once in November 1995 and then again in November 1996. These extensions are available via the Internet. Again available via the Internet on the Whitehouse home page are several speeches made by the President regarding such events as the signing of the "Antiterrorism and Effective Death Penalty Act of 1996."

Congressional Records. During the period 13-17 March, 1996, the US Senate conducted a hearing on the *Global Proliferation of Weapons of Mass Destruction*. This hearing also defined a few responsibilities of the Department of Defense, the Department of Energy and the Central Intelligence Agency in countering this threat.²⁷ As a result of this hearing the President signed into law "Title XIV, Defense Against Weapons of Mass Destruction" of the "National Defense

Authorization Act." This act is available through issue No. 9, November 1996 of the *Congressional and Administrative News*, which outlined specific laws regarding defense against the subject threat.

Government Policy and Doctrine. As stated earlier, President Clinton's *National Security Strategy of Engagement and Enlargement* of 1996 stated that countering the proliferation of WMD is one of his strategic goals.²⁸ Likewise, the Secretary of Defense in his document, *Proliferation: Threat and Response* of April 1996 echoed this general concern and specifically identified the threat of WMD in the hands of terrorists to be a major concern. This publication also tasked the regional Commanders in Chief (CINCs) for responsibility of counterproliferation and counterforce operations within their assigned geographic areas of responsibility.²⁹ *The National Military Strategy of the United States of America*, written by the Chairman of the Joint Chiefs of Staff and published in 1995, identified counterterrorism and counterproliferation to be primary objectives.³⁰

In its May 1996, *Report on Activities and Programs for Countering Proliferation* the Counterproliferation Program Review Committee identified the threats posed by specific nation-states and detailed progress on numerous counterproliferation programs. The overwhelming majority of the programs listed are targeted at preparing the DOD to effectively deter, counter, or respond to attacks from nation-states utilizing WMD.³¹

Books

To date none have been found offering other than the summaries of national policy stated above. Although there is a dearth of published works on counterproliferation strategies, goals, concept, etc., nothing has yet to be found specifically regarding counterproliferation and use of WMD by nonstate actors.

Periodicals

Leonard S. Spector, in his article “Neo-Nonproliferation,” questioned current national counterproliferation policy and coined the term “neo-nonproliferation” as a label more representing current national policy. Spector’s view is that many in the United States, including the current administration, have accepted that nonproliferation as a national policy has failed and that US national focus must shift toward countering/dealing with the effects of WMD utilized against the US (neo-nonproliferation). Further, Spector argues that the adoption of neo-nonproliferation, over nonproliferation is premature and that the nonproliferation battle is still worthwhile.³²

Defining the Counterproliferation Continuum

Defining the Counterproliferation Continuum created nothing new, it only provided a conceptual grouping of current governmental efforts serving to counter the subject threat. Currently, no clear policy or doctrine exists which delineates responsibilities or command relationships throughout the Counterproliferation Continuum. The lack of clear policy and doctrine directing these efforts was the catalyst behind this thesis.

Although the Counterproliferation Continuum illustrates the enormous efforts currently aimed at countering the subject threat, it also clearly illustrates the need for organizational structuring to provide focus and ensure better cooperation between separate agencies. The recommendation for a restructuring of command and control (C2) and organizational structure is specifically addressed in Chapter 6 of this thesis.

The roles of the separate governmental agencies in countering the subject threat were central in defining the Counterproliferation Continuum. These roles were either manifested in agency-specific materials, to which the author had limited access, or were gleaned from speeches and articles written by principal players from within those agencies.

Government Publications

Although no document has been found that identifies a counterproliferation continuum, the roles of different agencies can, in most cases, be found in agency-specific publications or alluded to in other documents. These agency-specific documents were utilized to define the Counterproliferation Continuum.

In the Secretary of Defense's report *Proliferation: Threat and Response* of April 1996, the role of the Department of Defense is clearly defined. This publication tasked the regional Commanders in Chief (CINCs) with responsibility for counterproliferation and counterforce operations within their assigned geographic areas of responsibility.³³ *The National Military Strategy of the United States of America*, written by the Chairman of the Joint Chiefs of Staff and published in 1995, identified counterterrorism and counterproliferation to be primary objectives, echoing the policy of the Secretary of Defense.³⁴

The *Chemical and Biological Weapons Deterrence Study*, developed by Anser Research Institute on contract to the Joint Staff, provides the dynamics of deterrence (a segment of the Counterproliferation Continuum) through the four phases of a conflict, but does not offer an overall process of counterproliferation. This study also addresses deterrent options available to the United States.³⁵

“Title XIV: Defense Against Weapons of Mass Destruction” of the *National Defense Authorization Act for the Fiscal Year 1997* (Public Law 104-201) provided specific roles and command relationships regarding the “Prevention,” “Crisis Response,” and “Consequence Management” segments of the Counterproliferation Continuum. This act was one of the few sources that provided clear specification on separate agency responsibilities. Although there are classified documents, interagency agreements, and plans which, in all likelihood provide clear delineation of responsibilities, these were not accessible to the author.

Congressional Records. Testimony before the US Congress has provided great insight in the efforts of many separate agencies involved in the Counterproliferation Continuum. The role of the CIA was defined in testimony given by the Director of Central Intelligence (DCI) on 20 March 1996. The record of that testimony is easily available through the CIA homepage. This testimony clearly outlines the subject threat, especially the role of the FSU in the proliferation of WMD and precursors (related technology, materials and economically motivated scientists and technicians).

In a hearing conducted 13-27 March 1996 before the Permanent Subcommittee on Governmental Affairs of the United States Senate on the "Global Proliferation of Weapons of Mass Destruction" (covered in greater detail earlier in this chapter), insight was gained into the roles of the Department of Defense, the Department of Energy and the Central Intelligence Agency.³⁶

Other

The majority of the source material used to create and define the Counterproliferation Continuum was found on the Internet. These materials included speeches by the DCI, Dr. John M. Deutch; the Coordinator for Counterterrorism, the Honorable Philip C. Wilcox, Jr.; and the Director of the FBI, Louis J. Freeh.

In a speech given to a conference on "Nuclear, Biological, Chemical Weapons Proliferation and Terrorism," Dr. Deutch (DCI), again clearly outlines the subject threat and touches briefly on the role of the Intelligence Community in countering this threat. Further clarification of the roles of the Intelligence Community comes from an Internet article entitled, "The Intelligence Community," by Dr. Deutch. Additional information on the Intelligence Community was gleaned from a National Security Council (NSC) factsheet titled: "Intelligence for the Twenty-First Century," available through the Whitehouse homepage.

The role of the Department of State (DOS) in countering the subject threat was largely defined in several speeches and testimonies given by Ambassador Philip C. Wilcox, Jr., the Coordinator for Counterterrorism. The first of these was a testimony given before the House Appropriations Subcommittee on commerce, Justice, and State, in Washington DC, on 12 March 1997. This testimony outlined the threat, the current US policy in dealing with terrorism and the role of the DOS in countering terrorism.

Another DOS agency involved in the Counterproliferation Continuum (specifically the "Reduction" segment) is the Arms Control and Disarmament Agency (ACDA). Specific information regarding this agency was available through the ACDA homepage.

¹William J. Clinton, President of the United States, letter to the Speaker of the House of Representatives and the President of the Senate concerning the proliferation of WMD (the White House, 12 November 1996).

²Hearing Before the Permanent Subcommittee on Investigations of the United States Senate investigating "*The Global Proliferation of Weapons of Mass Destruction*" during period 31 October through 1 November 1995 (Washington DC: Government Printing Office, 1996).

³Ibid.

⁴Hearing Before the Permanent Subcommittee on Investigations of the United States Senate investigating "*The Global Proliferation of Weapons of Mass Destruction*" during period 13-27 March 1996 (Washington DC: Government Printing Office).

⁵William J. Clinton, *National Security Strategy of Engagement and Enlargement* (Washington, DC: US Government Printing Office, 1996).

⁶US Department of Defense, "*Proliferation: Threat and Response.*" Report by Secretary of Defense, William J. Perry (Washington, DC: April 1996).

⁷US Department of Defense, "*National Military Strategy of the United States of America 1995*" (Strategy paper by the Chairman of the Joint Chiefs of Staff, General John M. Shalikashvili Washington, DC: Joint Chiefs of Staff, 1995).

⁸John McPhee, *The Curve of Binding Energy* (New York: Farrar, Strause and Giroux, 1974).

⁹Graham T. Allison, Owen R. Cote Jr., Richard A. Falkenrath, and Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge: MIT Press, 1995).

¹⁰Walter Reich, *Origins of Terrorism* (Cambridge, MA: Cambridge University Press, 1990).

¹¹Amir Taheri, *Holy Terror* (Bethesda MD: Alder and Alder Publishers, Inc., 1987).

¹²Yossef Bodansky, *Target America: Terrorism in the US Today* (New York: Shapolsky Publishers, 1993).

¹³Bruce W. Nelan, "The Price of Fanaticism," *Time*, 3 April 1995.

¹⁴Mari Yamaguchi, "Japan Sect Showed Doomsday Interest in the Ebola Virus," *San Francisco Examiner*, 24 May 1995.

¹⁵Robert Kupperman, "The Destructive Potential of Criminal Arsenals," *Harvard International Review*, Summer 95, Vol. 17.

¹⁶Robert Wright, "Be Very Afraid," *The New Republic*, 1 May 1995.

¹⁷Gavin Cameron, "Nuclear Terrorism: A Real Threat?," *Jane's Intelligence Review*, September 1996.

¹⁸Barbara Starr, "Chemical and Biological Terrorism," *Jane's Defense Weekly*, 14 August 1996.

¹⁹Carl Anthony Wege, "Hizbollah Organization," *Studies in Conflict and Terrorism*, vol. 17.

²⁰Center for Strategic and International Studies (CSIS) report: *The Nuclear Black Market* (Washington, DC: CSIS, 1996).

²¹Defense Group Incorporated, *Countering Proliferation: A National Emergency* (A White Paper written for the Secretary of Defense, Falls Church, VA).

²²John M. Deutch, speech given to the Conference on Nuclear, Biological, Chemical Weapons Proliferation and Terrorism on 23 May 1996.

²³Douglas D. Bodrero, *Changing the Mindset on Anti-Terrorism—A Police Perspective*, (a speech presented to the DOD Terrorism Conference, Ft. Walton Beach, FL, September 1996).

²⁴Bruce Hoffman, *Responding to Terrorism Across the Technological Spectrum*, (Carlisle Barracks, PA: US Army War College, July 1994).

²⁵Steven Sloan, "Terrorism: How Vulnerable is the United States?" in *Terrorism: National Security Policy and the Home Front* (Carlisle Barracks, PA: The Strategic Studies Institute of the US Army War College, May 1995).

²⁶Theodore R. Hanley, *Hamas: Will a Nuclear Weapon Be in its Arsenal?* (Master's thesis written in partial fulfillment of a Master of Science of Strategic Intelligence, Washington, DC: Joint Military Intelligence College, August 1995).

²⁷Hearing Before the Permanent Subcommittee on Investigations of the United States Senate investigating "*The Global Proliferation of Weapons of Mass Destruction*" during period 13-27 March 1996 (Washington DC: Government Printing Office).

²⁸William J. Clinton, "*National Security Strategy of Engagement and Enlargement,*" (Washington DC: Government Printing Office, 1996).

²⁹US Department of Defense. "*Proliferation: Threat and Response,*" (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996).

³⁰US Department of Defense. *National Military Strategy of the United States of America*, (Strategy paper by the Chairman of the Joint Chiefs of Staff, General John M. Shalikashvili, Washington, DC: 1995).

³¹Counterproliferation Program Review Committee, *Report on Activities and Programs for Countering Proliferation*, (May 1996).

³²Leonard S. Spector, "Neo-nonproliferation," *Survival*, Vol 37, spring 1995.

³³US Department of Defense. "*Proliferation: Threat and Response,*" (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996).

³⁴US Department of Defense. *National Military Strategy of the United States of America*, (Strategy paper by the Chairman of the Joint Chiefs of Staff, General John M. Shalikashvili, Washington, DC: 1995).

³⁵Anser Research Institute, *Chemical and Biological Weapons Deterrence Study*, (Arlington, VA: Anser Research Institute, 1995).

³⁶Hearing Before the Permanent Subcommittee on Investigations of the United States Senate investigating "*The Global Proliferation of Weapons of Mass Destruction*" during period 13-27 March 1996 (Washington DC: Government Printing Office).

CHAPTER 3

RESEARCH METHODOLOGY

The nature of the topic required extensive background reading on the threat, the governmental policies dealing with the threat, and the roles of the separate governmental agencies in countering it. Defining specific agency roles proved to be the greatest research problem; it proved to be extremely difficult to acquire information on the roles of the many separate governmental agencies that participate in the counterproliferation "process." Determining lead agency responsibilities during each phase of the Counterproliferation Continuum was likewise problematic. The lack of information, policy, and doctrine concerning governmental efforts to counter the subject threat may prove to be one of the more noteworthy findings of this thesis.

In addition to background reading on this topic, the author has met with personnel from the Special Operations Division of The Joint Staff. In the initial stages of this project, this extremely busy division of the Joint Staff provided invaluable research material and an "insiders" perspective on current unclassified counterproliferation efforts, without which this paper could not have been written.

The basic methodology utilized during this research project was simply to define the research problem in terms of the primary research question. Secondary questions were then identified which would lead to the answer of the primary question. Each secondary question was then researched via background readings, interviews and through study of service or agency doctrine. Once the subordinate questions were answered, the primary research question was,

almost by default, itself answered. The specific methodology for each question (to include the core research question and its subordinate questions) follows:

1. The Research Question: What are the roles of the separate governmental agencies in countering the proliferation of WMD among nonstate actors during each phase of the Counterproliferation Continuum?

Answering this question required the development of subordinate questions that, once answered and consolidated would provide the final answer to the research question. These subordinate research questions are listed below.

2. What is the Counterproliferation Continuum?

This question proved difficult to answer and was the main research effort. There is no one source that deals with the entire “process” of counterproliferation. There are agency-specific roles but no coordinating model upon which to base a conceptual understanding of the process. The complexity of the governmental effort to stem potential proliferation of WMD and counter existing proliferation is almost overwhelming. This question is answered in Chapter 5 of this thesis utilizing data on service and agency doctrine (their tasks and responsibilities), information taken from interviews with the Joint Staff, and finally, the authors understanding of the process to develop a conceptual model of the Counterproliferation Continuum

3. What is the threat to the United States, defined in terms of organization, capabilities and motivation?

This question required background reading into terrorism, terrorist groups and an understanding of the potential for terrorists acquiring nuclear, chemical or biological weapons. In Chapter 4 of this thesis, the threat will be defined in general terms, discussing the groups and organizations which pose the greatest threat to the United States. Additionally, Chapter 4 will also

discuss the weapons of mass destruction, their delivery systems, their availability, the ease of production, and the ability to transport nuclear, biological, and chemical agents. Sources in addition to the traditional library included the Foreign Military Studies Office aboard Fort Leavenworth, Kansas; the Internet (set search engine on "terrorism") and contacts made through the course of this project.

4. What is the national policy concerning this threat?

This question easily lended itself to traditional library research and Internet searches. Policy documents are on file. Specifically, the *National Security Strategy*, the *National Military Strategy* and the Secretary of Defense's *Strategy of Engagement and Enlargement* were available through traditional research. Detailed counterproliferation information was found from sources aboard Fort Leavenworth. An alternative source for this information was the Internet. This question is answered in Chapters 1 and 5.

5. What governmental organizations are involved in countering this threat? What is the role of each organization during each segment of the Counterproliferation Continuum?

These questions are really a restatement of the research question. This question required extensive reading of agency-specific publications, numerous books on each agency, and conducting interviews whenever possible. The author conducted personal liaison with the Special Operations Division of the Joint Staff in an attempt to locate detailed information on this question. This question is answered in Chapter 5.

6. Are the current interagency relationships and "command and control" structures adequate to orchestrate the national assets necessary to counter this threat?

This question first required definition of the Counterproliferation Continuum. Following the establishment of this framework (the Counterproliferation Continuum) from which to

conceptually understand the complexity of the C2 structures associated with the counterproliferation and counterterrorism arenas, the glaring over-complexity of the entire process was obvious.

In order to define the Counterproliferation Continuum, sources had to be found which clearly listed specific responsibilities for the functional areas defined by the Continuum. Identifying the roles of the separate government agencies involved in this entire process proved to be extremely difficult. Although the majority of these agencies had home pages on the Internet, very little of what they did in this arena was listed. Many of the details associated with the Continuum came from numerous Internet sources, each of which provided a piece of the puzzle or a clue which led to another detail.

Problems Encountered

This research project was limited by two factors which hindered this project from its onset. These two factors are listed below:

1. There has been little written addressing specifically the counterproliferation of WMD among nonstate actors (terrorists).
2. There may be more detailed information available but due to the classification and location of the material, the author could not access it.

CHAPTER 4

DEFINING THE THREAT

If our wishes are not granted we shall drag you into a sea of fire and blood. We shall be at war with you, hitting you everywhere!¹

Hashemi-Rafsanjani, December 1984
Commander-in-Chief, Iranian Military

This chapter will answer the following subordinate research question: What is the general threat to the US posed by nation states and nonstate actors armed with WMD, defined in terms of organization, capabilities and motivation? As the general threat posed by nation states is well documented and dealt with, this chapter will focus on the nonstate actor, the technology available to him and his motivation to utilize WMD against the US or her interests.

Nonstate Actors

Action and intent separate the nonviolent nonstate actor from the terrorist. By far, the majority of nonstate actors are far removed from the support or conduct of terrorist activities (for example, the International Red Cross is considered by many to be a nonstate actor). Additionally, not all terrorists are nonstate actors. The majority of international terrorism is state-sponsored, albeit indirectly. Although the stated objective of this thesis is to deal specifically with the nonstate actor, the line between independent and state-sponsored terrorist organizations becomes very blurred. Accordingly, although this thesis deals directly with the threat of nonstate actors armed with WMD, the threat of state-sponsored terrorism must also be discussed. For the

purposes of this thesis, the term “nonstate actor” will be synonymous with “terrorist” (individual or group).

Currently, due to the seemingly overwhelming capability of the US to wage conventional warfare, the most dangerous threat to the national security of the US is a nation state or nonstate actor armed with WMD. To date, the bulk of US nonproliferation and counterproliferation efforts have targeted nation states. These efforts coupled with the complementary threats of mutually assured destruction (MAD) and overwhelming, immediate retaliation have somewhat neutralized the threats posed by nation states armed with WMD.

Nonstate actors, due to the lack of geopolitical affiliation with nation states, remain difficult to monitor, negotiate with, and influence. No threat of retaliation-in-kind applies to nonstate actors, nor can sanctions, restrictions or diplomatic efforts specifically target these individuals or groups. The nonstate actor, like an insurgent, floats in the sea of the world populace.

Incidents of mega-terrorism (terrorism targeting large numbers of innocent persons or intended to cause great physical destruction) by nonstate actors have been conducted with increasing regularity. The first in a relative recent string of incidents was the 1983 suicide bombing of the Marine barracks in Beirut, Lebanon. This incident has been followed in more recent times by the New York World Trade Center bombing in February 1993, and the Khobar Towers bombing in Saudi Arabia in June 1996. Domestic attacks include the Oklahoma City bombing of 19 April 1995.

The common theme of these attacks is that they were planned to result in a great loss of life. Although not WMD related, these attacks are relevant to this study due to the underlying intention for great death and destruction. If large scale death and destruction are the goals of the

terrorist, then the employment of a weapon of mass destruction would aid greatly in realizing these goals.

Although most associate WMD with mega-terrorism, WMD, or the threat of it, may be used in less destructive, innovative ways. For example, on 24 April 1997, a package containing what appeared to be a culture dish of biological agent was delivered to the headquarters of B'nai B'rith, a Jewish organization in Washington, DC. Although the material was determined to be harmless, the use of a potential biological agent, seemingly intended to influence the Israeli-Palestinian peace negotiations, is an innovative means of capitalizing on the current attention and concern placed on biological terrorism.

Currently, the US is facing a series of circumstances that have never before existed. The first is that new, "immature" and largely unpredictable extremist groups are now entering onto the world stage, unfettered by controlling nation states. In the past, controlling nation states, which could be targeted by deterrence campaigns and promises of retaliation, controlled and prevented the use of WMD. The second factor greatly increasing the threat to the US is the increased availability of WMD. Never before has the potential for a small group to acquire nuclear, chemical and biological weapons or the means to produce them been so great. Finally, with the downfall of the FSU, the US is the premier player on the world stage. This leading role, while economically profitable for the entire world, puts the American eagle clearly in the crosshairs of every extremist group looking for a scapegoat to blame for the world's problems. Never before have nonstate actors with limited resources had the potential to affect the world's political and economic structures in so great a manner.

This chapter will first briefly describe the threats posed by each general grouping of nonstate actor. This initial discussion will also include the motivation and willingness to employ

WMD. Following this, the types of WMD (nuclear, biological and chemical) weapons (and agents) will be examined with the intent to identify the possible effects, the availability, the ease of production, the delivery means and the level of technology required to produce and employ these weapons.

Motivation of a Nonstate Actor (Terrorist)

There are two primary schools of thought concerning the psychological makeup of terrorists and terrorist groups. The first is that terrorists are logical decision-makers forced to utilize terrorism due to the relative size of their organization in relation to their adversary. The second school of thought is that terrorists are psychologically imbalanced. In fact, the truth is in between these two ends of the spectrum with each organization (and each individual) somewhere in this range. This section will discuss the types of nonstate actor (terrorist) outlining the greatest potential threat based upon the available literature.

Terrorist movements and their motivations have been categorized in many different ways by as many authors. In the interests of simplicity, a general set of four categories is offered: (1) religiously motivated, (2) ideologically motivated, (3) economically motivated, and (4) the “Crazies.”

While it is beyond the scope of this thesis to provide detail on each of these categories of nonstate actors, we can assume, based upon recent history, that at least the religiously motivated, ideologically motivated and the “Crazies” are willing and able to conduct mega-terrorism against the US. To further illustrate this threat only one category of nonstate actor will be discussed, the religiously motivated terrorist.

Religiously Motivated Nonstate Actors

General Discussion. The most recently publicized group of religiously motivated nonstate actors employing WMD is the Japanese religious cult Aum Shinrikyo. In March 1995, this group planted in the rush-hour subways of Tokyo, five chemical devices designed as lunch boxes and soft drink devices. These containers began releasing a deadly nerve agent (sarin) into the crowded subway cars. The relatively small casualty count (12 deaths and over 5,000 injuries) is attributed to an overly diluted mixture and the discovery of three of the five devices prior to ignition. Although this incident is the most publicized, in the period of July 1994 through July 1995 there were a total of ten terrorist attacks employing chemical weapons in Japan.² To date, members of Aum Shinryko have been charged with only two. In the course of investigating these attacks, a biological weapons research lab was found on property owned by the cult. This laboratory contained an incubator, an electron microscope, growth media and cultures of botulinum toxin. Additionally, this group owned helicopters with spraying equipment, a very effective delivery device.³ In short, this group had the tools and materials to wage biological warfare against whatever target they desired.

These incidents raise three specific concerns. The first is that the Aum Shinryko acquired these agents in a relatively short time. The second concern is that the group was extremely willing to cause large-scale death, thus breaking the formerly supposed “psychological barrier” of employing WMD in the conduct of terrorism. The third and by far the most pressing concern stemming from the Aum Shinryko is that the FBI and CIA (along with Japanese law enforcement authorities) were unaware of the groups potential, let alone its plans for an attack until it was too late to prevent it.

Although the Aum Shinryko attack in Tokyo has received much attention, by far the most feared group of nonstate actors are the middle-eastern Islamic extremist groups. These groups,

thought to be state-sponsored, chiefly by Iran and Syria, currently represent the greatest threat to the US.

Motivation. While the motivation behind the Aum Shinryko attacks remain unclear, the motivation behind the Islamic extremist groups is clearly defined. Their long-term goal is the conversion of all mankind to Islam...by force if necessary.⁴

Most authors knowledgeable in middle-eastern terrorism classify Islamic extremist groups as separate entities with differing objectives but which work in concert, with direction from controlling nation states, to achieve both the controlling states, and the groups, objectives. The binding holding these groups together is their shared radical interpretation of the Koran.

One author suggests rather strongly that these Islamic terrorist groups are conducting a Holy War, or *Jihad*, against the west and more specifically, the US.⁵ The objectives of the controlling nation states, Iran and Syria, are (1) to prevent the emergence of the US as the sole superpower and to prevent the domination of western values, and (2) "the eviction of the US, both as a political-military power and as the symbol of the Western and Judeo-Christian values, from the Islamic World, and especially the Near East."⁶

Although many Americans perceive a potential terrorist hiding inside every olive-skinned individual, only a small minority of the Muslim population has adopted these extremist attitudes.⁷ This small percentage of fanatics, however slight, still represents the greatest threat to the national security of the US.

Islamic extremist groups are known by many names but are generally grouped under the names HizbAllah and AIM (Armed Islamic Movement). These groups are largely focused on international terrorism directed by Iran and Syria.

Another Islamic extremist group, the Hamas, is singularly focused on “the creation of an Islamist-ruled Palestinian nation that encompasses all Palestinian lands dating back before the Balfour Declaration. Hamas does not recognize Israel’s independence and strives for its complete expulsion from Palestinian soil.”⁸ Although the stated objective of Hamas does not clearly match that of the HizbAllah and AIM (and their directing nation states), they still enjoy the backing and support of these nation states as their goals indirectly support the larger Islamist goals.

The study and definition of each specific Islamic extremist group is well beyond the scope of this thesis. This section is intended only to portray the extent and organization of the Islamist extremist terrorist movement and give a glimpse of the assets and capabilities they can employ.

Willingness to Use WMD? These Islamic extremist groups find motivation for terrorist actions through their radical interpretation of the Koran. Mega-terrorism committed on behalf of the defense of Islam is considered sanctioned by God and any Muslim killed in the attack would be revered as a martyr and guaranteed admittance to heaven.⁹ This explanation helps understand the vision of the smiling, suicidal driver of the truck which rammed into the Marine barracks in Lebanon in 1983.

Clearly, religious based extremist groups are willing to employ WMD to achieve their objectives. With religion and the God it serves as their shield, these organizations and individuals will readily send thousands of non-believers to their death. These groups, armed with WMD, pose a formidable threat to the national security of the US. Based upon all readings to date, it is considered to be only a matter of time before such an attack against the US is launched.

The Threat Posed by the Different Types of WMD

Nuclear Devices

The threat of a terrorist employed nuclear weapon has been the subject of debate and research since 1946.¹⁰ These concerns however, have increased considerably in the recent past. This newly awakened concern has two causal factors which have arisen since the collapse of the FSU. The first factor is the increased availability of nuclear materials from the FSU. Since its collapse, subsequent inspections of weapons holding facilities within the FSU have proven that the accounting and security procedures concerning WMD are extremely questionable. A much written about example of this lack of control of nuclear materials tells of a member of the US Energy Department visiting the Kurchatov Institute near Moscow. This official found approximately 160 pounds of weapons-grade uranium stored in lockers secured only by a chain.¹¹ Likewise, there are many accounts of attempted black market sales of nuclear materials. In March 1994 President Yeltsin was delivered a report from Russia's Federal Security Service (FSB) which detailed 900 thefts from military and nuclear plants and 700 thefts of secret knowledge in the second half of 1993 alone.¹²

Security of WMD within the FSU remains a problem despite the efforts of the US Cooperative Threat Reduction Program. This program has attempted to assist the Russian government in increasing accountability and security of WMD while also buying weapons grade nuclear materials for disposal in the US. Clearly, based on known incidents and the growing influence and capabilities of the Russian "Mafia," the acquisition of nuclear materials by a determined nonstate actor seems eminently possible.

The second area of concern following the collapse of the FSU involves the "brain drain" of scientists and technicians. These highly trained and educated personnel were once highly paid and

respected members of Soviet society. Even before the fall of the FSU, these personnel found themselves underpaid and undergoing a loss of status. Currently, their base wage is approximately \$67.00/month (US). The Russian press has reported that Iran is offering \$5000.00/month (US) for the services of former Soviet scientists.¹³ The concern is that these highly educated and trained personnel will seek employment elsewhere, thereby providing the determined and well-financed nonstate actor with the expertise required to develop a nuclear weapon. It should also be noted that a nuclear weapon which would be totally successful in a terrorist attack does not need to be nearly as efficient, nor as compact, as does a military weapon. A nuclear weapon, however crude, detonated in a major urban center of the US would result in countless dead and have a profound effect on every aspect of life in the US.

Assuming nuclear materials and expertise could be acquired by a determined nonstate actor, how would he use them to attack the US? First, the detonation of even a low yielding nuclear device in a crowded urban area, perhaps in the financial district of New York City or Washington DC, could have disastrous effects on US political and economic sectors.

Likewise, the employment of a radiological dispersal device (RDD) could render the same psychological impact, mass casualties and years of uninhabitable contamination as would a nuclear weapon.¹⁴ Although not providing the spectacular explosion associated with a nuclear reaction, such a device utilizing conventional explosives to disperse radioactive materials throughout a given area would be immensely easier to acquire or produce than a nuclear weapon.

A related issue is the possibility of a terrorist attack on a nuclear reactor within the US. If successful, the potential results could be essentially the same as an RDD. The explosion in Chernobyl in the FSU on 26 April 1996, although an accident resulting from a reactor experiment, illustrates the potential for damage resulting from a failed (or damaged) reactor. This experiment-

gone-awry resulted in a hydrogen explosion with horrific consequences. The Chernobyl incident spread huge quantities of radioactive material spread over “very long distances” reaching every country in the northern hemisphere.¹⁵ The after-effects of this disaster included the resettlement of over 130,000 people and the large-scale decontamination of an unknown number of square miles of forests, fields, and lakes. This decontamination process required the removal of topsoil, the construction of dams to “ensure the hydrological isolation” of the most seriously contaminated areas and the construction of a fenced exclusion zone.¹⁶

Although Chernobyl was clearly the result of a faulty, poorly designed reactor, the resulting aftermath provides a clear picture of the potential effects of an RDD. For such an incident, even if the effects of Chernobyl were cut by a third, to occur in a major urban area of the US is unthinkable. Although the thought of fencing off Washington DC, or portions of it, as a result of the detonation of an RDD does not seem a possibility, it is.

The availability of materials, technology and expertise, coupled with the willingness of independent actors scrambling to upset the world stage, greatly increases the potential for a terrorist initiated nuclear incident aimed at crippling the US. Many analysts deem the costs of constructing, or acquiring, a nuclear device to be beyond that which terrorist organizations are willing to pay. However, when the effects (an immediate disastrous effect on the US economic and social structure—the payoff) of such an explosion is considered, the threat seems to grow. The possibility of such an attack, thought by many to be highly improbable, is clearly possible and cannot be discounted.

Chemical Agents

The weapon of choice for the Aum Shinrikyo cult in Japan, chemical weapons offer a relatively inexpensive means to produce the horrific effects often sought after by terrorist groups.

Compared to other weapons of mass destruction, chemical weapons offer a relatively low yield of death and destruction, but when compared to conventional explosives chemical weapons are cheaper, lighter and relatively easy to employ. Although the effects of a chemical attack would be less than if nuclear or biological agents were utilized, the ease with which chemical agents could be acquired or produced easily balances the relative decrease in effect.

The information necessary to produce chemical weapons is well-known and requires only a first rate chemist with even limited financing. The materials and technology required to produce chemical agents are often dual use, and although some items may now controlled, all could be obtained by a determined, well-financed terrorist.

Employment of chemical agents during a terrorist attack can be accomplished through several methods. These methods include those designed to release their agents in a confined space canisters (as used in the Tokyo subway attack), aerial dispersal via small planes, dispersal via explosives, and poisoning of municipal water supplies. In the US, municipal water supplies have been unsuccessfully targeted at least twice by separate domestic terrorist groups.

Deadly as they are, the lethality of chemical agents is entirely dependent upon the amount and concentration of agent delivered to the target site. Without an understanding of the meteorological effects, the characteristics of the agent and the intended target, insufficient agent may strike the target area to produce casualties. As stated in the section discussing the cult, Aum Shinryko, there have been ten chemical attacks in a two year period, delivered via several means, with no resulting "mass" of casualties.¹⁷ Based on the limited "success" of this group, the relative ease of acquisition of chemical weapons must be balanced against the limited effects associated with terrorist employment of chemical agents.

The lack of an effective response capability to a terrorist attack utilizing chemical weapons is a great concern to many. In an exercise conducted in New York City during April 1995, response to a no-notice Tokyo-like scenario resulted in large numbers of simulated casualties and highlighted the lack of US preparedness. In December 1995, another simulated exercise was conducted in California and resulted in the same conclusion; the casualty figures in this exercise were 300 "dead" and 500 "poisoned."¹⁸

Chemical weapons are thought to be the least effective of the WMD. This perceived lack of effectiveness is a relative concept depending upon the target and the effectiveness of the agent. 500 dead in a New York City subway, however horrific, may not represent a major threat to US national security. Consider the same number of casualties, only change the location to the Capital Building in Washington, DC during a Presidential Address; in this setting 500 casualties represents a clear and present danger to the national security of the US.

Biological Agents

Although not as overtly horrific as nuclear weapons, biological agents are a close second in the most feared category of the weapons of mass destruction. Based on cost to produce, relative lethality, operational effectiveness, and probability of use, many authorities would argue that biological agents should be considered the number one threat to the US. The inherent lethality of biological agents, combined with the delay between the attack (release of the agent) and the onset of symptoms make this weapon almost impossible to defend against or respond to. A terrorist "attack" (release of the biological agent) could begin and end with no apparent indication that it had taken place until 3-5 days later when symptoms began to appear. Once these symptoms appear, the terrorists are long gone and the dying begins.

Biological agents lend themselves to anonymity. This anonymity begins with the production of the agents themselves. Utilizing easily acquired cultures and multiple-use laboratory equipment, the potential terrorist would bring little if any attention on himself during the production process. The means of delivery is easily compatible with the desire for anonymity. An Office of Technology Assessment (OTA) report provides a chilling scenario: a small private airplane with 220 pounds of anthrax spores flies over Washington, DC, on a north-south route, trailing an invisible mist that could conceivably kill a million people on a day with moderate winds.¹⁹ By the time the symptoms appeared the pilot could be well out of the country leaving little trace of his participation in the attack.

Biological agents, with their high lethality do not have many of the problems associated with nuclear weapons. First, there is no effective means of detection; current sensor technology is minimal. Secondly, production of these lethal agents does not require a large investment in hardware and expertise, nor is there a need to buy or steal the agent of destruction. One former assistant director of the US Arms Control and Disarmament Agency is convinced that a major biological arsenal could be built with \$10,000 worth of equipment housed in a 225 square-foot room.²⁰

Ease of production of biological agents is enhanced by improvements in technology and the proliferation of technology and laboratory expertise. To compound the problem of detection, facilities producing wine, beer, dried milk, food, and agricultural products have the technology and expertise to produce biological warfare agents.²¹ Although current numbers of biological agents are thought to be few, defensive measures remain questionable at best. Advancements in biotechnology have made genetically engineered agents designed for increased lethality a reality.

Defense against a biological attack by terrorists is limited at best. Physical measures such as masks and clothing reduce the effectiveness of most pathogens but as there would be little or no advance warning of a terrorist-delivered biological attack these measures would have little value. The value of defensive inoculations, the current "best answer" to the problem, is also limited due to the potential capability of bio-engineering organisms to be resistant to any known vaccine or antibiotic.²²

In addition to the great lethality of current biological agents, there are long-term area denial considerations associated with biological agents. For example, the island utilized by the British to test an anthrax agent in W.W.II is still uninhabitable.

Another, little discussed option open to terrorists is to attack the US economy through its agriculture. The health of the US economy, let alone its citizens, is dependent upon the success of US agriculture. A successful attack against US agriculture could have far reaching ramifications to the political, social, and economic sectors of the US. Introduction of biological agents intended to dramatically reduce or destroy specific crop yields could have a major, long-term effect on the stability and health of the US economy and seriously reduce US global influence.²³

Biological agents have the potential to cripple the economy, damaging the current political and social framework of the US, thereby threatening her role on the world stage. Biological agents are inarguably lethal, almost impossible to detect at any stage prior to the actual employment and are inexpensive, both in actual cost and resources, to produce. As defensive measures against such attacks are limited at best, the US is dependent upon intelligence to identify potential terrorists and prevent such attacks. Deterrence and preemption are currently the best, and only avenues to preventing a disaster.

Chapter Summary

WMD employed by nonstate actors has become the greatest threat to the national security of the US, easily eclipsing conventional threats. There are nonstate actors with the willingness, resources and capabilities to employ WMD against the US. The technology to produce or means to acquire nuclear, chemical and biological agents is available, as is the required expertise. Recent events have shown the willingness of extremist groups to kill large numbers of innocent people with conventional, non-WMD weapons. If mega-terrorism is the goal of the terrorist, WMD offers potential terrorists with relatively inexpensive, extremely effective means of accomplishing that goals.

Successful prevention of terrorist attacks hinges upon the ability of US intelligence gathering agencies to identify and locate the terrorist(s) and the agent of destruction. Supporting this effort are countless import and export restrictions, inspections, regulations, policies, laws, deterrent measures, and diplomatic efforts aimed at stopping the proliferation of these weapons of mass destruction. Only by focusing the entirety of governmental assets on this extremely complex threat to the national security of the US can it be countered.

The remaining objective of this thesis is to identify the process by which these threats are currently being countered and secondly, to assess the capability of the current US command and control (C2) structure and organization to counter this threat.

¹Amer Taheri, *Holy Terror* (Bethesda, MD: Adler and Adler Publishers, Inc., 1993), 39.

²The Henry L. Stimson Center, *The CWC Chronicle*, Volume I, Issue 8, September, 1995. Internet source: <http://www.clark.net/pub/stimson/cwc/chron8.htm>.

³Ibid.

⁴Amer Taheri, *Holy Terror* (Bethesda, MD: Adler and Adler Publishers, Inc., 1993), 10.

⁵Ibid. xiii.

⁶Ibid.

⁷Theodore R. Hanley, *Hamas: Will a Nuclear Weapon be in its Arsenal?* (Masters Thesis, Washington, DC: Joint Military Intelligence College, August 1995), Chap 3.

⁸Ibid.

⁹Ibid.

¹⁰Gavin Cameron, Nuclear Terrorism: A Real Threat?, *Jane's Intelligence Review*, September 1996, 422.

¹¹Ibid. 422-423

¹²Ibid. 423.

¹³ Ibid. 423.

¹⁴Theodore R. Hanley, *Hamas: Will a Nuclear Weapon be in its Arsenal?* (Masters Thesis, Joint Military Intelligence College, August 1995), Chap 4.

¹⁵ Frank Barnaby, "Nuclear Accidents Waiting To Happen," *The World Today*, April 1996, 93.

¹⁶Ibid. 94.

¹⁷ The Henry L. Stimson Center, The CWC Chronicle, Volume I, Issue 8, September, 1995. Internet source: <http://www.clark.net/pub/stimson/cwc/chron8.htm>.

¹⁸The Henry L. Stimson Center, News Advisory, *First Anniversary of Tokyo Subway Poison Gas Attack: Is the US Prepared for a Similar Attack?*, Internet source: <http://www.clark.net/pub/stimson/cwc/issuebrf.htm>.

¹⁹Robert Wright, "Be Very Afraid," *The New Republic*, 1 May 1995, 25-26.

²⁰Leonard A. Cole, "The Specter of Biological Weapons," *Scientific American*, December 1996, 60.

²¹Terry N. Mayer, "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction," *Battlefield of the Future*, Internet source: <http://www.cdsar.af.mil/battle/chp8.html>

²²Ibid.

²³Robert P. Kadlec, "Biological Weapons for Waging Economic Warfare, *Battlefield of the Future*, Internet source: <http://www.cdsar.af.mil/battle/chp10.html>

CHAPTER 5

COUNTERING THE THREAT: POLICIES, AGREEMENTS, INITIATIVES, ROLES AND THE COUNTERPROLIFERATION CONTINUUM

The significant problems we face cannot be solved at the same level of thinking that was present when the problems were created.¹

Albert Einstein

This chapter will answer the following research questions: (1) What is the Counterproliferation Continuum?, (2) What is the national policy concerning this threat?, (3) What governmental organizations are involved in countering this threat? What is the role of each organization during each segment of the Counterproliferation Continuum?

The threat posed by nonstate actors armed with WMD has been detailed in Chapters One and Four of this paper. The successful countering of this threat will require significant, coordinated contributions from numerous governmental agencies (national, state and local) and allied nations. The roles of the separate governmental agencies in the overall counterproliferation arena are not well defined and, when published, are largely limited to describing the process of counterproliferation of WMD as the process pertains to nation states. Despite the enormity of the threat and the likelihood of its realization, the threat posed by nonstate actors armed with WMD is not specifically addressed in other but very general terms.

During the cold war, WMD were largely under the perview and control of nation states. In this era, counterproliferation and counterterrorism were considered separate disciplines. This

separation extended to language, definitions, conceptual models and government organization.

Current counterterrorism and counterproliferation models are based on these cold-war precursors.

With the end of the cold war and the proliferation of WMD among nonstate actors, the overall counterproliferation effort must now consider the very real and dangerous threat posed by terrorists armed with these weapons. Thus, with the intertwining of players in these once separated arenas, the counterproliferation effort is now inextricably linked to the counterterrorism effort.

Although both the enormity of the threat and the link between counterproliferation and counterterrorism are universally clear, there has been no major, formal structural realignment to deal with this threat. This is not to say there has not been great efforts aimed at bolstering the counterterrorism forces of our nation with the tools of counterproliferation; clearly there have been. The question remains as to the effectiveness of the current structure and interagency agreements in dealing with this threat. This is a question which will be discussed in later chapters. Before an assessment of the effectiveness of the current counterproliferation and counterterrorism models can be made, the current structure and roles must be identified and defined.

Initially, this thesis focused specifically on the efforts to counter the proliferation of WMD among nonstate actors and to disregard the overall counterproliferation effort as it relates to nation states. This attempt to focus on one aspect of the proliferation problem (nonstate actors) without taking into account the role of nation states has proven impossible. A major finding of this paper is that both efforts are linked. For example, international trade agreements and restrictions dealing with WMD, or the materials to produce them, are an extremely important factor in reducing the availability of these materials to both nation states and nonstate actors. Hence, one aspect of the problem cannot be addressed without discussing them all. One of the main contributions of this paper is the creation of a model (the Counterproliferation Continuum) from which to conceptually visualize the many diverse agencies participating in the process of counterproliferation. The

Counterproliferation Continuum describes US government efforts to counter the proliferation of WMD among both nation states and nonstate actors.

Thus, in order to provide a basis for further focus on the effort to counter the proliferation of WMD among nonstate actors, the policies, initiatives and agreements which generally target the counterproliferation efforts between nation states must first be addressed. This brief overview of the current counterproliferation process is necessary to provide an understanding of the complexity of the threat and the efforts, at every level of the US government, to counter it. Accordingly, this chapter will include a brief summation of current nonproliferation and counterproliferation agreements and initiatives. Additionally, although current counterproliferation agreements, initiatives and regimes are written to regulate, or limit, actions of nation states, the indirect effects of these agreements will serve to decrease the availability of materials, technology and expertise necessary for nonstate actors to develop their own WMD.²

This chapter will first review US national policy concerning the subject threat, including government initiatives to affect the acquisition and budgetary process. This seemingly irrelevant material must be presented to demonstrate the linkage, both organizationally and fiscally, that is rapidly drawing the counterproliferation and counterterrorism efforts together. Secondly, this chapter will address current international agreements, and finally, will outline a model of the Counterproliferation Continuum, detailing the roles and functions of the separate governmental agencies throughout each segment of the continuum.

Current US Policy

The enormity of the threat posed by nonstate actors armed with WMD has been recognized and addressed by the current administration. Presidential recognition of this very real threat is evident in the President's *National Security Strategy of Engagement and Enlargement* in which

President Clinton stated, “Terrorism involving weapons of mass destruction represents a particularly dangerous potential threat that must be countered.”³ Further, more serious recognition is seen in the President’s 14 November 1994 declaration of a “national emergency with respect to the unusual and extraordinary threat to the national security, foreign policy, and economy of the United States posed by the proliferation of nuclear, biological, and chemical weapons (“weapons of mass destruction”) and the means of delivering such weapons.”⁴ In recognition of this ongoing threat, the initial declaration has been extended twice, first on November 14, 1995 and then again on November 14, 1996.⁵

The threat of WMD wielded by both nation states and nonstate actors, prompted the writing of *Proliferation: Threat and Response* of April 1996. In this document the Secretary of Defense describes the threat posed by WMD in the hands of both nation states and nonstate actors, and provides the Department of Defense response, in broad terms, to counter this threat.⁶ In establishing the priority of this effort, the Secretary of Defense provides a still applicable, cold war quote by the Russian physicist Andre Sakharov: “Reducing the risk of annihilating humanity in a nuclear war carries an absolute priority over all other considerations.”⁷ Although this quote was clearly targeted at nation states and the possible outbreak of nuclear war between them, it has applicability in that no one can predict how any nation will respond to a terrorist delivered weapon of mass destruction. In *Proliferation: Threat and Response* the Secretary of Defense acknowledges that the threat of retaliation, once recognized by the doctrine of “Mutually Assured Destruction” (MAD), was no longer relevant when facing nonstate actors wielding WMD.⁸

Further, the Secretary of Defense outlined the DOD three-part strategy to counter this threat. The first part of this strategy, “reducing the threat,” describes the efforts by the US to assist nation states, most notably Russia, “to reduce, dismantle, safeguard and even eliminate these weapons.” The second part of this strategy is to “deter against the threat,” by “maintaining strong

conventional forces and a smaller but robust nuclear deterrent force.” The third part of the Department of Defense’s strategy, “defend against the threat” introduces the Defense Counterproliferation Initiative.⁹

The specific objectives of the Defense Counterproliferation Initiative are to: “(1) prevent the acquisition of NBC (Nuclear, Biological and Chemical) weapons and their delivery systems; (2) roll back proliferation where it has occurred; (3) deter the use of NBC weapons and their delivery systems; and (4) adapt United States military forces and planning to respond to regional contingencies in which United States, allied, and coalition forces face NBC threats.”¹⁰ For fiscal year 1997, the total DOD projected expenditures in the counterproliferation and counterforce arenas are approximately \$4.3 billion.¹¹ Investment in military systems associated with counterproliferation are focused in four areas: “passive defense, active defense, counterforce; and measures to counter the paramilitary, covert and terrorist NBC threats.”¹²

In response to Presidential and DOD direction, the Chairman of the Joint Chiefs of Staff has written a *National Military Strategy of the United States of America*. This 1995 strategy paper addresses the overall military strategy in support of national objectives and security. Additionally, it echoes the threat posed by the unconventional wielding of WMD by nonstate actors.¹³ Although this strategy only touched on the counterproliferation and counterterrorism roles of the DOD, the contribution made by the military in the effort to counter and respond to this threat is extensive and is seen throughout the Counterproliferation Continuum. The role played by the Department of Defense in the overall counterproliferation effort will be detailed later in this chapter.

Acquisition and Expenditures

In an effort to provide additional, consolidated information to follow-on researchers, this section will provide a brief overview of the funding and oversight linkage relating to the overall government effort to counter the proliferation of WMD. This section will specifically focus on DOD research, acquisition, and oversight organization (the DOD was the only department with readily available information concerning counterproliferation research, development and acquisition). Additionally, there is clear reference to the role of the DOD as the lead in interagency development and acquisition of equipment utilized in the counterproliferation effort.¹⁴

Oversight Programs/Committees

As counterterrorism, counterproliferation, and counterforce efforts are inextricably linked to funding and congressional oversight, a brief synopsis of current programs and committees is relevant.

Counterproliferation Program Review Committee

Congress constituted the Counterproliferation Program Review Committee to provide status reports on activities to accomplish necessary improvements identified by the Non-Proliferation Program Review Committee. This committee is chaired by the Secretary of Defense and comprised of the Secretary of Energy, Director of Central Intelligence (DCI), and the Chairman of the Joint Chiefs of Staff, or their direct representatives. This committee's report constitutes a national investment strategy for the US overall counterproliferation effort. The annual report produced by this committee is titled, *Counterproliferation Program Review Committee Report on Activities and Programs for Countering Proliferation*.¹⁵ The 1996 report identified a national nonproliferation strategy comprised of "four key aspects: (1) prevent the

acquisition of WMD, (2) roll back existing WMD capabilities, (3) deter WMD use, and (4) adapt military forces and emergency assets to respond to WMD threats.”¹⁶

The 1996 Report on Activities and Programs for Countering Proliferation identified nine major DOD spending programs designed specifically to counter “paramilitary, covert delivery, and terrorist WMD threats.”¹⁷ Although these programs are DOD initiated and sponsored, there are numerous agreements securing interagency cooperation and use of the technology developed in these programs.¹⁸

The Counterproliferation Council (CP Council)

The Counterproliferation Council is made up of The Deputy Secretary of Defense (Chairman), The Under Secretary of Defense for Acquisition and Technology, the Under Secretary of Defense for Policy, The Vice Chairman of the Joint Chiefs of Staff, the Under Secretaries of the Military Departments, The Vice Chiefs of the Military Services, the Assistant Secretary of Defense for International Security Policy, the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs and the Director for Strategic Plans and Policy for the Joint Staff.¹⁹ This council is designed to “provide high level management and oversight to review Department of Defense progress in coordinating counterproliferation-related programs and activities, resolve counterproliferation-related issues, and work closely with the Joint Chiefs of Staff and Services to develop appropriate acquisition and force planning strategies that will ensure the effective implementation of counterproliferation objectives. The Counterproliferation Council will also oversee Department of Defense counterproliferation activities in interagency and international fora;” this includes coordination on matters relating to counterproliferation issues with other government departments and agencies.²⁰

Non-Proliferation Program Review Committee (NPRC)

In response to congressional direction, the Non-Proliferation Program Review Committee was constituted in 1994 to review existing, government-wide, capabilities and identify areas where progress and increased support is needed.²¹

Counterproliferation Support Program

The Counterproliferation Support Program is a Department of Defense initiative specifically designed to address Department of Defense shortfalls identified by the Non-Proliferation Review Committee.²² This program is intended to provide a forum for the interagency development of programs designed to “counter paramilitary, covert delivery, and terrorist WMD threats.”²³ Examples of other agencies benefiting from projects sponsored by this program include the Federal Bureau of Investigation, the Secret Service, the Customs Service and the Department of State. These joint, interagency programs are coordinated through the Technical Support Working Group (TWSG).²⁴

International Agreements: A Brief Synopsis

In order to understand the domestic counterproliferation efforts, a basic understanding of the major counterproliferation treaties, conventions, and “regimes” is required. This section will provide a brief summary of the objectives and current status of the major, relevant agreements the United States recognizes.

Treaty on the Nonproliferation of Nuclear Weapons (NPT)

The Nuclear Nonproliferation Treaty, which became effective in 1970, established a forum for technological, informational and hardware exchange for the purposes of peaceful uses of nuclear energy. It also establishes obligations for nuclear and non-nuclear nation states regarding the manufacture, transfer and use of nuclear weapons and materials; in effect, this treaty prohibits

the transfer and acquisition of nuclear weapon capabilities.²⁵ This treaty, sponsored by the United Nations and signed by over 60 nations, has as one of its major objectives, "The timely detection of diversion of significant quantities of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection."²⁶

Nunn-Lugar Cooperative Threat Reduction Program (CTR)

The Cooperative Threat Reduction Program, was established to provide support to the New Independent States (NIS) (Russia, Ukraine, Belarus, and Kazakstan) of the former Soviet Union, in the elimination or reduction of weapons of mass destruction. This program currently consists of approximately 40 separate projects to assist in the accounting, safeguarding, transfer, reduction, or elimination of WMD in these states. Additionally, the Cooperative Threat Reduction Program supports demilitarization efforts which are aimed at expanding defense military contracts, conversion of defense industries and reemploying weapons scientists and technicians.²⁷ In this aspect, this program specifically targets the retraining and employment of scientists and technicians who could assist in providing the capability to produce and employ WMD to nonstate actors.

Protocol For The Prohibition Of The Use in War Of Asphyxiating, Poisonous, Or Other Gases, And Of Bacteriological Methods Of Warfare (Geneva Protocol)

Signed 17 June 1925 by 141 states, this protocol prohibits the use in war of asphyxiating, poisonous, or other gases, and of bacteriological methods of warfare. It should be noted that most of the signatories made reservations to the effect that they would abide by the terms of the protocol as long as the other states did not resort to the use of these materials.²⁸

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC)

The Chemical Weapons Convention, opened for signature on 13 January 1993, and signed by 161 countries (but ratified by only 74 of the 161), bans chemical weapons, their use, development, production, acquisition, and stockpiling.²⁹ This convention provides for declarations of weapons by type and quantity and allows for routine as well as challenge inspections to verify adherence.³⁰ This agreement eventually requires all signatories to destroy their chemical weapons within ten years of the treaty entering into force; this agreement is the most intrusive of the international agreements concerning WMD.³¹ On 24 April 1997 the US Senate ratified this treaty making the US the 74th nation to ratify the treaty.³²

Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC)

The Biological and Toxins Convention bans the development, production, stockpiling and acquisition of biological agents or toxins “of types and in quantities that have no justification for prophylactic, protective, and other peaceful purposes,” to include weapons and means of delivery.³³

Convention On The Physical Protection of Nuclear Material

Adopted in March 1980, and adopted by 48 states, this convention obligates signatories to provide security (at agreed upon levels) for nuclear materials during international shipment across their territories or while in ships or aircraft under their jurisdiction.³⁴

NATO Initiatives

Following the 1994 North Atlantic Treaty Organization Summit meeting, three groups were formed to explore and counter the effects of the proliferation of WMD. While these groups target nation states, their efforts indirectly affect the ability of nonstate actors to produce, transfer

and employ WMD. The first of these groups, the Joint Committee on Proliferation monitors overall alliance efforts. The second, the Senior Politico-Military Group on Proliferation, focuses on traditional nonproliferation efforts. The third group, the Senior Defense Group on Proliferation examines the defense aspects of proliferation, including deterrence and protection measures.³⁵

START I and II

START I Treaty called for cooperative reduction of warheads, missiles and bombers between the US and the FSU, now Russia. Ratified in 1994, the missile reduction schedule mandated by the treaty has been met by both parties, largely as a result of the Cooperative Threat Reduction program.³⁶

The START II Treaty, ratified by the US, and awaiting ratification by Russia, would eliminate bombers and missiles that had previously carried over 14,000 Russian and American warheads. This would, in effect, cut the cold-war levels of both Russian and US arsenals of nuclear weapons by two thirds.³⁷

Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies

This new regime, the Wassenaar Arrangement, which replaced the now defunct Coordinating Committee on Multilateral Export Controls (COCOM), was established on 12 July 1996. As of July 1996 the Wassenaar Arrangement was comprised of 33 member states. This regime has been established “to contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies.”³⁸

Defense Counterproliferation Initiative

The specific objectives of the Defense Counterproliferation Initiative are to: "(1) prevent the acquisition of NBC (Nuclear, Biological and Chemical) weapons and their delivery systems, (2) roll back proliferation where it has occurred, (3) deter the use of NBC weapons and their delivery systems, and (4) adapt United States military forces and planning to respond to regional contingencies in which US, allied, and coalition forces face NBC threats."³⁹

International Agencies and Initiatives: A Brief Synopsis

The international agencies and initiatives listed below have been formed to assist in countering the proliferation of WMD. The policies and export controls enacted by member states have limited the availability of materials and agents related to the production, use or delivery of WMD. The overall affect of these organizations, agencies and initiatives is to greatly limit the availability of these agents and materials to nation states or nonstate actors who would otherwise be intent on producing and utilizing WMD to further their respective aims.

United Nations

Established in 1945, the United Nations has provided a forum for negotiation and production of the major treaties, conventions and agreements aimed at limiting, or stopping the proliferation of weapons of mass destruction. The United Nations attempts to accomplish this aim through producing agreements, verifying holdings and when necessary, applying sanctions to offending states.

International Atomic Energy Agency

Established by the United Nations in 1957, the International Atomic Energy Agency (IAEA) has two broad objectives: (1) "to accelerate and enlarge the contribution of atomic energy

to peace, health and prosperity throughout the world” and (2) “to ensure, so far as it is able, that assistance provided by it (IAEA) or at its request or under its supervision or control is not used in such a way as to further any military purpose.”⁴⁰ This second objective requires that the agency “establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency, or at its request or under its supervision or control, are not used to further any military purpose; and to apply safeguards, at the request of the parties, to operations under any bilateral or multilateral arrangement, or, at the request of a State, to any of that State’s activities in the field of atomic energy.”⁴¹

Conference on Disarmament

Formed in 1979, the Conference on Disarmament is a subgroup of the United Nations, budgeted by, and reporting to that body. Although tied to the United Nations, this group adopts its own agenda and conducts its work by consensus with the overall aim of stopping the proliferation of weapons of mass destruction. This Conference has been the instrument through which many disarmament/nonproliferation treaties have been negotiated. Examples of notable treaties include the Nuclear Nonproliferation Treaty, the Biological Weapons and Chemical Weapons Conventions.⁴²

Nuclear Suppliers Group

The Nuclear Suppliers Group, established in 1975, consists of 30 supplier states and exists to ensure nuclear exports are made only under safeguards approved by the International Atomic Energy Agency. The stated goal of this group are “to ensure that nuclear exports are made only under appropriate safeguards, physical protection, and nonproliferation conditions, and other appropriate restraint.”⁴³

Zanger Committee

The Zanger Committee first met in 1971 to draft a “trigger list” of materials and equipment which could contribute to the proliferation of nuclear weapons. By 1974, this group had reached consensus on what is now known as the Trigger List. The Trigger List first defines “source,” or special fissionable materials and secondly identifies equipment or materials especially designed or prepared for the processing, use or production of special fissionable materials.⁴⁴ The goal of the Zanger Committee is that the materials and equipment identified on the Trigger List be subjected to the safeguards established by the International Atomic Energy Agency when supplied by signatories to the Nuclear Nonproliferation Treaty and supplied to any non-nuclear weapons state.⁴⁵ The Zanger Committee is made up of 29 states (including the US) which meet twice a year to discuss exports, export controls and nonproliferation issues; the Committee’s meetings are confidential and informal.⁴⁶

Missile Technology Control Regime (MTCR)

First meeting in 1983, the Missile Technology Control Regime is an informal, non-treaty association of governments dedicated to limiting the spread of WMD by controlling their delivery systems. The goal of the Regime is to “limit the spread of weapons of mass destruction by controlling the delivery systems, especially rockets (ballistic missiles, space launch vehicles, sounding rockets) and unmanned-air-vehicles delivery systems (cruise missiles, target drones, and reconnaissance drones) capable of delivering at least a 500 kilogram payload to a range of at least 300 kilometers.”⁴⁷ Although the original intent of this group was to limit the delivery systems of nuclear weapons, in July of 1993, these controls were extended to missiles capable of delivering chemical and biological weapons as well.⁴⁸

Australia Group

Established in 1985, the Australia Group is an informal association, working on the basis of consensus, which exists to limit the spread of chemical and biological weapons through the control of chemical precursors, equipment necessary to produce chemical and biological agents, and biological agents and organisms.⁴⁹ This group reinforces the precepts upon which the 1925 Geneva Protocol, the 1972 Biological and Toxins Weapons Convention and the 1993 Chemical Weapons Convention were based.⁵⁰ The Australia Group has published a “warning list” which details dual use chemicals, equipment related to the manufacture of chemical weapons precursors and biological organisms and equipment which are linked to the production of these weapons.

Member states have agreed to adhere to export controls on these identified items.⁵¹

Domestic Initiatives

Antiterrorism and Effective Death Penalty Act of 1996

Signed into law by President Clinton in April 1996, this new legislation offers law enforcement officials new tools in combating terrorism of all types.⁵² This legislation extends federal jurisdiction to anyone who commits a terrorist attack in the United States or uses the United States as a planning ground for terrorist attacks.⁵³ It also bans fundraising for terrorist organizations and allows deportation of terrorists without being compelled to provide classified information.⁵⁴ Further, it requires certain explosive materials to be “marked” with some sort of identification mechanism and increases control over biological and chemical weapons.⁵⁵ This act toughens penalties over a range of terrorist crimes and bans the sale of defense materials to countries determined not to be cooperating fully with United States antiterrorism efforts.⁵⁶ This legislation greatly assists law enforcement agencies to counter those terrorist groups/nonstate actors who have the potential to utilize WMD in acts of terrorism.

**Increased DOD Funding In Support of Counterforce Capabilities And Measures
To Counter Paramilitary, Covert And Terrorist Threats**

Via the Counterproliferation Support Program, the DOD is funding numerous projects in support of the counterforce, counterterrorism and counterproliferation efforts.⁵⁷ These programs include: sensors, collateral effects mitigation, weapon effects and target response, advanced weapons and warheads, munitions for the neutralization of chemical and biological agents, and NBC weapons response teams.⁵⁸

Increased Support For The Federal Bureau of Investigation

Since 1992, the Federal Bureau of Investigation budget and staff dedicated to counterterrorism programs have been increased by approximately 40%.⁵⁹ Additionally, the FBI has created a Counterterrorism Branch which functions as the center for information collection, analysis and dissemination to counter domestic and international terrorism. The FBI has also opened a liaison office in Moscow and has plans to open offices in Cairo, Islamabad, Tel Aviv and Beijing.⁶⁰

Iran And Libya Sanctions Act

Signed into law by the President of the US on 5 August 1996, this legislation allows the President to impose an embargo against specified nations, depriving them of revenues that can be used in support of terrorist activities and also denying them the benefits of trade and investment with the US until they terminate their sponsorship of terrorism.⁶¹ This legislation applies to Iran, Libya, Sudan, and Iraq.

The laws and policies of the US government, in concert with the international agreements listed above serve to define portions of the governmental effort to counter the subject threat. These efforts, coupled with countless other governmental efforts combine to form the

Counterproliferation Continuum. The efforts of the separate governmental agencies identified in the Continuum are clearly linked by the common purpose of preventing the use of WMD against the US or her interests. The roles of the separate governmental agencies are detailed below.

The Counterproliferation Continuum: Defined

The Counterproliferation Continuum has been largely designed utilizing portions of existing service or agency doctrine describing particular contributions to the overall effort to counter the proliferation of WMD. An exception to this are the segments of the Continuum labeled “Attack” and “Retaliation.” These segments were developed by the author to fill a gap requiring some type of offensive action. Such actions could range from the arrest of nonstate actors by law enforcement agencies to the utilization of DOD assets to prevent the utilization of WMD. It should also be noted that for the “Attack,” “Retaliation,” and “Crisis Response” segments, little reference material was available. As no doctrinal publications were available, the capabilities and anticipated responses in these segments were drawn solely from the experience and knowledge base formed by the author throughout the course of this study. Accordingly, to the authors knowledge, these segments do not mirror current US government policy or intent.

While the majority of separate-agency doctrinal models were targeted at countering the proliferation of WMD among nation states, this model incorporates all doctrine relevant to current efforts at countering the proliferation of WMD among both nonstate actors (terrorists) and nation states.

The segments of the Counterproliferation Continuum are defined below utilizing the 1994 version of Joint Publication 1-02, or if not covered in this publication, the most relevant source of information will be utilized. Following this cursory listing, each segment of the Continuum will be explained in detail, to include the roles of the separate governmental agencies throughout the

segment. Certain roles and functions of some agencies will continue throughout the Continuum. In these cases, the agency will be listed and discussed under the first appropriate segment and will be listed under each applicable segment but not discussed unless their mission or role has changed with relation to that segment.

A detailed review of most governmental agencies, even those unrelated to the subject matter, would disclose at least some contribution to the Counterproliferation Continuum. While the major agencies participating in the subject effort are listed, it is by no means inclusive; a complete listing of every contributing agency would clearly be beyond the scope of this thesis. For example, in the Congressional Record of 17 April 1996, Senator Specter, identified, "...96 different entities which have authority of one sort or another over this field (the proliferation of WMD)."⁶² In the interests of brevity only those agencies with significant roles will be mentioned.

The ten segments of the Counterproliferation Continuum are identified below. Following this outline, each segment of the Continuum is defined, discussed in detail, and the roles of the separate governmental agencies within each segment are likewise defined.

The Counterproliferation Continuum: Outline

1. Dissuasion
2. Prevention
3. Deterrence
4. Reduction
5. Defense
6. Intelligence
7. Attack
8. Retaliation

9. Crisis Response

10. Consequence Management

The Counterproliferation Continuum: Segment Definition, Discussion, and Roles of the Separate Governmental Agencies

Dissuasion

Definition: “To divert by advice or persuasion: turn from something by reasoning.” Additionally, for the purposes of this paper, dissuasion includes those measures taken to persuade nation states and nonstate actors to not utilize WMD and to not provide production support or the weapons themselves to other nation states or groups. (Author definition)

Dissuasion: Discussion.

This segment of the Counterproliferation Continuum consists of a campaign designed to outline the political, economic, social and military costs of investing in the production, support, transport or utilization of WMD.⁶³ The major factors helping to dissuade nations from acquiring WMD consist of regional arms control, confidence building, security assistance, alliance efforts and military-to-military contacts.⁶⁴ Actions taken during this segment are intended to neutralize those factors which lead to the proliferation of WMD. One of the primary factors leading to the proliferation of WMD among nation states remains regional instability and the perception of national “insecurity” by nation states.⁶⁵ Accordingly, the Department of State is the lead agency during this segment, endeavoring to reduce the regional instability which fosters the proliferation of WMD. Although this segment of the continuum focuses on dissuading nation states and nonstate actors against the use and transfer of WMD among nation states, the effects of these efforts would also greatly affect the proliferation of these weapons, technology, and materials necessary to produce them, among nonstate actors. As regional security and regional confidence building is a

strong factor in the success of this segment of the continuum, the Department of Defense, with its forward deployed forces, is a major factor in maintaining regional stability.

Dissuasion: Roles.

President: The President establishes the policies, sets the tone of foreign relations and either makes or approves major decisions regarding the use of forces, assets and diplomatic pressure to achieve specific results.

National Command Authorities (NCA): The President and the Secretary of Defense (or their duly deputized alternates or successors) are responsible for ensuring national and military unity of effort in countering the threats to the US. This responsibility will remain true throughout the Continuum.⁶⁶ This linkage between policymakers and executors is an absolute necessity to ensure success in countering this threat.

National Security Council (NSC): The NSC advises the President on the integration of domestic, foreign, and military policies relating to national security. This is the highest Executive Branch entity providing review of, guidance for, and direction to, the conduct of all national foreign intelligence and counterintelligence activities.⁶⁷ The activities of the NSC remain a constant throughout the Counterproliferation Continuum.

Department of State (DOS): The Secretary of State is the President's principle advisor in the formulation and conduct of foreign policy.⁶⁸ The DOS is the agency primarily responsible for planning and implementing that policy.⁶⁹

Department of Defense (DOD): The DOD provides the forward deployed forces that ensure a great degree of regional stability and international security. The presence of these forces overseas lends a perception of US commitment to long term stability and has resulted in fewer nations attempting to acquire WMD as a means of self-protection.

Intelligence Community: Although specific roles are defined in detail in the Intelligence segment, the Intelligence Community provides intelligence on potential and actual proliferators of WMD, thus focusing the dissuasion efforts.

Prevention

Definition. Measures taken by the public and private sectors to prevent the proliferation of WMD (including related technology and expertise necessary to produce and deliver them) among nonstate actors and nation states alike. (Authors definition)

Prevention: Discussion.

This segment of the counterproliferation continuum consists of those measures taken to prevent the proliferation of WMD among nation states and nonstate actors alike. In this segment, proliferation is prevented through the use of international treaties, regimes, controls and agreements, that limit the export, production and transfer of WMD, or the materials and equipment to develop them. Examples of these agreements are listed in this chapter. Nation states are encouraged to endorse, support and comply with pertinent treaties, regimes, agreements and controls pertaining to WMD. For those nation states either not endorsing, or not complying with, nonproliferation agreements or trade restrictions, international sanctions can be employed to assist in ensuring compliance. Keys to successful prevention are full and accurate accounting of WMD by nation states and effective verification procedures. An example of proliferation prevention is the Iran and Libya Sanctions Act which allows the President to impose a trade embargo on nation states contributing to terrorism and potentially to the proliferation and use of WMD. Due to the predominant role of negotiation, diplomacy, treaty writing and enforcement, the DOS has the lead in this segment.

Prevention: Roles.

NCA: no change.

NSC: no change.

Intelligence Community: no change.

DOS: The DOS Under Secretary of State for Arms Control and International Security Affairs is responsible for the formulation of arms control policy.⁷⁰ This Undersecretary has Assistant Secretaries of Political-Military Affairs and Intelligence and Research to support policy formulation. Specific actions taken during this segment include international arms control treaties such as the Nuclear Nonproliferation Treaty and trade agreements/restrictions such as export controls voluntarily self-imposed on selected items contributing to the proliferation of WMD as identified by groups such as the Australia Group, the Nuclear Suppliers Group and the Zangger Committee. These groups and their efforts have been detailed earlier in this chapter. Additionally, the DOS has been designated the lead agency in counterterrorism abroad.⁷¹ It accomplishes this large task functioning as a coordinator of agencies, supporting FBI efforts to pursue and punish terrorists abroad who violate US laws.⁷²

Arms Control and Disarmament Agency (ACDA): The only independent government agency that deals solely with arms control, nonproliferation, and disarmament policies.⁷³ This single-function agency has as its mission: "to strengthen the national security of the United States by formulating, advocating, negotiating, implementing and verifying effective arms control, nonproliferation, and disarmament policies, strategies and agreements."⁷⁴ The Director ACDA serves as the principle advisor to the President, the National Security Council and the Secretary of State on arms control issues.⁷⁵ ACDA is concerned with conventional, nuclear, biological and chemical weapons. It has led all US delegations to the United Nations Conference on Disarmament, and has either led or assisted in all major negotiations with the FSU.⁷⁶

Department of Defense (DOD): The DOD assists in the “Prevention” segment of the Counterproliferation Continuum through two agencies. The first, the On-Site Inspection Agency (OSIA), conducts on-site inspections and escort and monitoring requirements for numerous treaties.⁷⁷ The second, the Air Force Technical Applications Center, monitors compliance with nuclear treaties through a global network of nuclear event detectors.⁷⁸

Department of Energy (DOE): DOE’s Office of Arms Control and Nonproliferation develops DOE policies, plans and procedures relating to arms control, nonproliferation, export and technology transfer controls and international safeguards.⁷⁹ The priorities for this office include securing FSU nuclear materials and expertise, limiting weapons-usable fissile materials, establishing nuclear reductions, strengthening the nuclear nonproliferation regime and controlling nuclear exports.⁸⁰

Nuclear Regulatory Commission (NRC): The NRC is responsible for “regulation of commercial nuclear power reactors, non-nuclear power research, test and training reactors; fuel cycle facilities; medical, academic, and industrial uses of nuclear materials; and the transport, storage, and disposal of nuclear materials and waste.”⁸¹ Additionally, the NRC licenses the possession, use, processing and handling of export nuclear material and provides assistance to the FSU in nuclear material control, accounting, and physical protection measures and procedures.⁸²

Department of Treasury (DOT)/United States Customs Service (USCS): The Office of Investigations under the USCS investigates violations of trade laws, focusing on illegal exports of missile technology, nuclear technology and chemical and biological warfare technology from the US.⁸³

Department of Commerce (DOC): The Bureau of Export Administration (BXA) supports the effort to counter the proliferation of WMD through the enforcement of the Export Controls Act (EAA).⁸⁴ The EAA includes export controls which support the counterproliferation and the

counterterrorism efforts by prohibiting, limiting or controlling the export of commodities and technology that may contribute to the proliferation of WMD. The BXA is the licensing agency for dual-use commodities and technical data. Additionally, BXA provides assistance to Russia and other emerging countries in developing effective export control systems.⁸⁵

Deterrence

Definition: The prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.

Deterrence: Discussion.

This segment of the counterproliferation continuum consists of those measures taken to ensure all nation states and nonstate actors understand the potential costs of employing, or threatening the employment of WMD against the United States or her interests. Measures include the threat of retaliation via economic, military or judicial means. Although the DOS has a large role in communicating the deterrent threat, the lead agency in this segment is the DOD, which has forces forward deployed and CONUS (continental United States) based forces capable of responding to threats or attacks from anywhere in the world. Although the most obvious deterrent capability resides in the DOD, the capabilities of the Intelligence Community to identify threats to US interests coupled with the ability of the FBI and local law enforcement agencies combine to pose a significant threat to nonstate actor contemplating conducting terrorist attacks against the US.

Deterrence: Roles.

NCA: The NCA is instrumental in sending a very clear message concerning US willingness to respond to attacks against US interests by nation state or nonstate actors utilizing WMD.

NSC: no change.

DOS: The Department of State has responsibility for diplomatic negotiations concerning the use, production and proliferation of WMD. The promise of harsh diplomatic, economic and military action, communicated by the DOS aids in the deterrence effort. Other more subtle deterrence programs include the DOS International Terrorism Information Rewards Program which offers up to two million dollars for information preventing acts of international terrorism against US citizens or property or which leads to the arrest or conviction of those responsible for those acts. This program was responsible for bringing to justice Ramzi Ahmed Yousef who is one of the two men identified as being responsible for the World Trade Center Bombing in February 1993.⁸⁶ This one program, which would challenge the loyalty of even the most loyal of followers of a terrorist cause, poses a threat to all but the most committed nonstate actors.

DOD: The Department of Defense provides the forces and assets constituting the threat of retaliatory action in response to use of WMD against the United States or her interests. These forces are in the form of conventional ground, air, sea or Special Operations Forces.

Intelligence Community: Although the specific roles of the individual agencies which make up the Intelligence Community are detailed in the "Intelligence" segment of the Counterproliferation Continuum, this community will provide information upon which to focus deterrence efforts. An effective Intelligence Community with its ability to identify and locate nonstate actors which threaten the US also serves to deter potential terrorist attacks.

Department of Justice (DOJ), Federal Bureau of Investigation (FBI), and local law enforcement agencies (LEAs): These agencies with their ability to identify, pursue and arrest individuals and organizations conducting terrorist attacks against the US serve to deter potential terrorists.

Reduction

Definition: Voluntary reduction of arsenals of WMD in compliance with treaty obligations, regimes or accomplished through the use of sanctions or other pressures to force reduction of weapons through non-violent means. (Author definition)

Reduction: Discussion.

This segment of the counterproliferation continuum consists of those measures taken to reduce existing stockpiles of WMD. These measures exist in the form of bilateral or multilateral treaties, agreements, regimes or controls which target the reduction of WMD by signatories. Two of the many examples of these measures are the Nuclear Nonproliferation Treaty and the Cooperative Threat Reduction Program which has resulted in approximately 3,800 former Soviet nuclear warheads being removed from the inventory and the dismantlement of 900 long-range missiles and bombers.⁸⁷ The key, relevant treaties, regimes, controls and agreements are detailed earlier in this chapter.

Reduction: Roles.

NCA: no change

NSC: no change.

DOS: Although there is no additional contribution to what was discussed in the “Prevention” segment, DOS is the lead agency in this segment due to the detailed and numerous treaties regarding arms control and nonproliferation of WMD.

ACDA: no change.

DOD: The OSIA and the AFTC, explained in the “Prevention” segment of the Counterproliferation Continuum assist in ensuring treaty compliance which lead to reduction of WMD.

Intelligence Community: no change from that listed in the Intelligence segment.

DOJ/FBI: no change.

Defense

Definition: "Capability of resisting attack; practice or manner of self-protection; means or method of defending; defensive plan, policy or structure." For the purposes of this paper, this term will include all intelligence gathering efforts, assets and sources in support of the counterproliferation/counterterrorism effort. Additionally, defense entails all measures taken, both active and passive, to prevent, or limit the effectiveness of WMD. (Defense not listed in Joint Publication 1-02 in this general a context; base definition taken from Webster's Third New International Dictionary)

Defense: Discussion

In this segment of the Counterproliferation Continuum, the emphasis shifts from macro measures (bilateral and multilateral agreements, treaties, regimes and controls) intended to dissuade, deter, prevent and reduce the possibility of an attack against the US or her interests to focusing on specific threats. These threats may consist of an actual weapon of mass destruction or a group which has threatened to employ WMD. An absolute and inherent requirement in this segment is the ability to collect intelligence on both the individuals or groups most likely to conduct terrorist attacks utilizing WMD and the weapons themselves (what type, how were they made, how can production of the weapon be stopped, how the effects be reduced, etc.) Although the intelligence collecting responsibilities and roles will be detailed in the "Intelligence" segment, the ability to effectively defend against an attack by a nonstate actor armed with WMD is dependent upon the quality of intelligence available. The "defense" segment of the Counterproliferation Continuum consists of those measures taken to prevent or neutralize attacks utilizing WMD against the US or her interests. This segment includes both active and passive defensive measures. Examples of passive measures range from import/export restrictions to area restrictions, means of

detecting WMD, sensors, camouflage and disinformation. Active defensive measures include the improvement of security measures around nuclear facilities, key installations and command and control nodes as well as measures taken to intercept delivery modes of WMD. Additional active measures include the use of intelligence gathering assets (detailed in the "Intelligence" segment), sensors, searches, inspections, and the preparation of chemical and biological prophylaxis measures and treatments. Participants in this phase include the DOD, DOJ, FBI, CIA, DOE, Defense Nuclear Agency (DNA), DOC, DOT/USCS, INS, Department of Transportation (DOTR), Center for Disease Control (CDC). The DOS is the lead agency "for managing and coordinating counterterrorism policy and operations abroad, whereas the Department of Justice has been designated the lead agency for domestic counterterrorism."⁸⁸

Defense: Roles.

NCA: The coordination responsibilities of the NCA remain the same throughout the continuum. However, as this segment begins to focus on specific individuals and groups armed, or potentially armed, with WMD, decisions regarding employment of assets and potential outcomes would likely be made at this level.

NSC: The role of the NSC during the "Defense" segment of the Counterproliferation Continuum is supportive to that of the NCA.

DOD: The DOD has very specific responsibilities regarding counterproliferation. On 25 May 1995, the President revised the Unified Command Plan to reflect his decision to assign to the regional combatant commanders (CINCs) the mission of counterproliferation in their geographic areas of responsibility.⁸⁹ The CINCs in turn, have prioritized requirements to accomplish this mission. The CINCs first priority for enhancing their counterproliferation capabilities is to improve their ability to detect and characterize chemical and biological threats at long range. The second is to develop the capability to intercept cruise missiles. Their third priority is to improve

their ability to identify, characterize and defeat underground targets (where WMD, and their delivery systems, are produced and stored).⁹⁰ Although these efforts are clearly aimed at defending against attacks from nation states, these capabilities also support the defense against attacks from nonstate actors. DOD investment in the counterproliferation arena is in four basic areas: passive defense; active defense; counterforce; and measures to counter paramilitary, covert, and terrorist NBC threats. In countering the threats posed by paramilitary, covert delivery and terrorism, the DOD is establishing, training and equipping Joint Special Operations Forces (SOF), Explosive Ordnance Disposal (EOD) teams, and WMD response teams to detect and neutralize WMD both in the US and overseas. These DOD assets can be provided to assist other governmental agencies in countering this threat.⁹¹

DOS: The DOS, as the negotiating arm of the US and as the lead counterterrorism agency abroad, is responsible for coordinating the efforts of US government agencies—DOJ, FBI, CIA, DOD and the Federal Aviation Administration (FAA), to name a few and to work with foreign governments in the counterterrorism effort.⁹² Additionally, many of the programs identified in the Deterrence segment also constitute a portion of the Defense segment of the Counterproliferation Continuum, specifically, programs such as the International Terrorism Information and Rewards Program constitute one of the first lines of defense against attacks by nonstate actors armed with WMD.

DOJ/FBI: The FBI is designated as the lead agency in domestic counterterrorism. This role requires close coordination with the other arms of the Intelligence Community and with civilian law enforcement agencies. During the “Defense” segment of the Counterproliferation Continuum, the FBI conducts investigatory operations against potential or actual terrorist groups which have the potential to possess WMD.

DOE: The DOE, through its Office of Nonproliferation and National Security, pursues the following priorities: “1) secure nuclear materials and expertise in the FSU; 2) control weapons-usable fissile materials; 3) establish transparent and irreversible nuclear reductions; 4) strengthen the nuclear nonproliferation regime; and 5) control nuclear exports.”⁹³

Intelligence

Definition. According to 50 U.S.C. 401a, Intelligence includes foreign intelligence and counterintelligence. Foreign intelligence is defined as “information relating to the capabilities, intentions, or activities of foreign governments or elements thereof, foreign organizations, or foreign persons.”⁹⁴ Counterintelligence is defined as “information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or assassinations conducted by or on behalf of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities.”⁹⁵

Intelligence: Discussion.

By law, the Intelligence Community consists of the “Office of the Director of Central Intelligence (which includes the National Intelligence Council), the CIA, the National Security Agency, the Defense Intelligence Agency, the Central Imagery Office, the National Reconnaissance Office, other offices within the DOD for the collection of specialized national intelligence through reconnaissance programs, the intelligence elements of the Army, Navy, Air Force, Marine Corps, Federal Bureau of Investigation, the Department of Treasury, the Department of Energy, the Bureau of Intelligence and Research of the DOS; and such other elements of any department or agency as may be designated by the President or jointly by the Director of Central Intelligence and the head of the department or agency concerned.”⁹⁶ The Intelligence Community conducts the following missions in support of US interests.⁹⁷

1. Support to American diplomacy in the form of advanced warnings of events in other countries requiring action by policymakers.
2. Support to monitoring of treaties and other agreements to include arms reduction, economic sanctions and WMD nonproliferation agreements.
3. Support to military operations.
4. Support to defense planning.
5. Economic intelligence.
6. Countering activities abroad that threaten US interests to include:
 - a. Counterterrorism. The intelligence community seeks to identify threats to US interests and citizens abroad and also frequently provides warnings of potential terrorist activities and assists other governments in stopping terrorist actions.
 - b. Counternarcotics.
 - c. Counterproliferation. Intelligence focuses on those nations who are attempting to build or acquire WMD in violation of international law or which are threatening US interests.
 - d. Countering International Organized Crime.
7. Support to criminal justice and regulatory agencies.
8. Collecting and analyzing environmental information.
9. Collecting and analyzing information on world health problems.
10. Information warfare.

In broad terms, the two major functions of the Intelligence Community include information collection and analysis of that information.⁹⁸ Other, lesser functions include counterintelligence and covert action.⁹⁹ Counterintelligence is the process by which the country, as well as intelligence agencies, are protected from the activities of foreign intelligence services.¹⁰⁰ By law, the responsibility for carrying out covert actions rests with the CIA. It should also be noted that any

covert action must be approved by the President. Examples of covert action include “propaganda activities, support to political or military factions within a particular country, technical and logistical assistance to other governments or actions undertaken to disrupt illicit activities that threaten US interests, e.g. terrorism or narcotics trafficking.”¹⁰¹ Additionally, the CIA has responsibility for paramilitary covert actions with the DOD as a supporting agency when requested.¹⁰² The CIA is also responsible for coordinating counterintelligence operations abroad.¹⁰³

Intelligence: Roles.

NCA: no change.

NSC: no change.

DCI: explained above.

CIA: explained above.

DOD:

National Security Agency (NSA): The NSA, with assistance from the military services, collects, processes, and reports signals intelligence (SIGINT) to the intelligence gathering, policy making, and operating elements of the government to include the DOD.¹⁰⁴

Defense Intelligence Agency (DIA): The DIA provides intelligence support to military operations throughout the conflict spectrum. The DIA also supports weapons system acquisition and planning as well as defense policymaking.¹⁰⁵ Additionally, the DIA manages all DOD non-SIGINT intelligence collection and manages all DOD Human-source Intelligence (HUMINT) collection.¹⁰⁶

National Reconnaissance Office (NRO): As the agency tasked with managing the national program chartered to meet US spaceborne reconnaissance needs, the NRO collects intelligence to provide indications and warnings of threats to US interests, monitors arms control

agreements, military operations and exercises, and also monitors natural disasters and other environmental issues.¹⁰⁷

The Services: Each military department has intelligence and counterintelligence elements that operate both overseas and in the US which respond to the national, departmental and operational command requirements.¹⁰⁸

DOE: The DOE, through its various offices, provides policy makers and the intelligence community with intelligence on proliferation of WMD, foreign nuclear weapons and materials, science and technology and nuclear energy safety. Additionally, the DOE provides assessments of nuclear threats, blackmarket sales of nuclear material and threats to DOE nuclear and energy facilities and personnel.¹⁰⁹

DOS: The DOS, through its diplomatic arm, provides HUMINT to the Intelligence Community and through its Bureau of Intelligence and Research, coordinates research and intelligence collection on key foreign policy issues.¹¹⁰

Department of the Treasury (DOT): Although not formally engaged in intelligence collection, the DOT is responsible for overt collection of financial and monetary information abroad.¹¹¹ It should be noted that although the Secret Service, Customs Service, Internal Revenue Service and the Bureau of Alcohol, Tobacco and Firearms have no collection missions in support of the Intelligence Community, these organizations can provide relevant information concerning threats to US interests to the appropriate intelligence, or law enforcement agency.

FBI: The FBI is responsible for conducting counterintelligence and counterterrorism within the United States; intelligence byproducts are disseminated, as appropriate, to other elements of the Intelligence Community.¹¹²

Attack

Definition: "Any hostile offensive action." For the purposes of this paper, "Attack" entails actions taken to prevent detonation or release of nuclear, chemical or biological agents. These actions include arrest, detainment, containment, offensive action, and direct action. (Attack not listed in Joint Publication 1-02 in this general a context; base definition taken from Webster's Third New International Dictionary)

Attack: Discussion: This segment of the Counterproliferation Continuum consists of those measures taken to prevent the use, or further use of WMD by both nation states and nonstate actors/terrorists. This segment includes a range of measures involving DOD, CIA, FBI and LEA assets which range from attacks against nation states (by DOD assets) to the arrest of individuals or groups which break trade or import/export restrictions (by FBI, USCS). If in the case of international terrorism, the DOS, with Presidential approval, would coordinate offensive operations designed to prevent the terrorist employment of WMD against the US or her interests.

Additionally, as the lines between nation states and nonstate actors blur, especially in the case of state-sponsored terrorism, this segment includes measures taken against nonstate actors and supporting nation states. Measures included under this segment include the arrest, interdiction, seizure, neutralization or destruction of forces, groups or individuals armed with WMD, required delivery systems or the means to produce them.

Attack: Roles

President: During the "Attack" segment of the Counterproliferation Continuum, the President, with advice from the NSC, would have final approval on measures taken to prevent the use or further use of WMD against the US or her interests.

DOS: As the designated lead agency in countering terrorism abroad, the DOS would coordinate all counterterrorism operations overseas against a terrorist threat involving WMD. This

coordination role of the DOS extends to all counterterrorism operations conducted abroad with the potential exclusion of those operations which are Presidential directed.

DOD: The DOD provides the capability to conduct attack operations to "...seize, disable, destroy, disrupt, interdict, neutralize, or deny the use of NBC weapons and launch platforms and their supporting command, control, and communications; logistics structure; and reconnaissance, surveillance, and target acquisition platforms while minimizing collateral effects."¹¹³ Attack operations include action by air, land, sea, space, and special operations forces (SOF).¹¹⁴ The DOD also maintains the capability to support operations conducted by other governmental agencies during this segment.

Intelligence Community: Provides the necessary intelligence upon which to base any type of offensive action.

CIA: In addition to gathering intelligence in support of attack operations, the CIA has the capability to conduct covert operations against terrorist organizations (or any other illicit activities that threaten US interests) abroad; this capability is contingent upon Presidential approval.¹¹⁵

FBI: The lead agency for domestic counterterrorism, the FBI is also the senior law enforcement agency tasked with countering the threat posed by nonstate actors armed with WMD. In support of this mission, the FBI, in January 1996, created a single unit within the counterterrorism section at FBI headquarters to handle all nuclear, chemical and biological proliferation matters.¹¹⁶

LEAs: Local LEAs can be the first line of attack against domestic terrorist activities.

DOE: DOE assets have the capability to support offensive operations conducted by the FBI or CIA.

Retaliation

Definition: "To return like for like: to return evil for evil." For the purposes of this paper, Retaliation includes all offensive actions taken in response to the use of WMD against the US or her interests. (Retaliation not listed in Joint Publication 1-02; base definition taken from Webster's Third New International Dictionary)

Retaliation: Discussion: This segment consists of those actions taken in response to an attack on the US or her interests by nation states or nonstate actors armed with WMD. Potential retaliatory responses range from nuclear strikes to economic sanctions against the attacking entity.

Retaliation: Roles:

President: Following an attack against the US or her interests by an enemy wielding WMD the President with advice from the NSC, would determine the appropriate retaliatory response.

DOS: Following an attack by a nation state or a nonstate actor against the US or her interests, the DOS would first attempt to provide diplomatic stability throughout the world, with the intent to reduce the long term economic and political instability which such an attack would precipitate. As the retaliatory response may include economic and diplomatic sanctions, the DOS would make recommendations concerning these possible measures to the President.

DOD: In retaliation for an attack against the US or her interests, and upon receipt of a Presidential directive, the DOD is capable of providing a multitude of responses including nuclear strikes, conventional operations, and direct action missions. With forces and assets strategically located throughout the world, the DOD is capable of rapid retaliatory response against any known entity. However, this massive retaliatory capability would be largely irrelevant if the identity of the attackers were unknown or if no clear ties to a geographical entity could be established.

FBI: In the event of an attack on the US or her interests by a nonstate actor, the FBI would conduct the investigation to identify, arrest and prosecute the individual or group which conducted the attack. This process would include any assistance or coordination required from LEAs, the DOD, or foreign governments.

Intelligence Community: Following an attack by either a nation or nonstate actor utilizing WMD, the demand for intelligence will be great and immediate. This intelligence demand will focus on who conducted the attack, how it was conducted, why it was conducted and how best to respond to the attack. This intelligence will be the basis for any retaliatory response.

CIA: In addition to its intelligence gathering role, the CIA, with Presidential direction, may be tasked with conducting covert actions against the nation, group or individuals which initiated the attack against the US.

Crisis Response

Definition: Those measures taken in response to a threat of terrorist detonation of a weapon of mass destruction; includes all actions taken to prevent the detonation or release of nuclear, biological or chemical agents. (Author definition).

Crisis Response: Discussion: In the initial stages of a crisis involving the potential employment of WMD against the US or her interests, certain actions must be undertaken to prevent the employment a weapon of mass destruction and prepare for dealing with the consequences should the prevention efforts fail. These actions may include the following: (1) negotiations with the threatening entity to prevent or delay the employment of WMD; (2) attacks made against the threatening entity to prevent the employment of WMD; and (3) initiation of measures to lessen the destruction or death resulting from an attack utilizing WMD should prevention efforts fail.

Crisis Response: Roles:

President: During a crisis involving the employment of WMD against the US or her interests, the President, advised by the NSC and his other advisors, would decide on the appropriate response.

DOD: In the event of a crisis facing the US involving WMD, the DOD would alert conventional air, ground, sea, space and Special Operations Forces in preparation for efforts to prevent the employment of WMD against the US or her interests. The DOD would also alert, activate and transport NBC response teams to the crisis area.

DOE: Immediately upon notification of a potential domestic incident involving WMD, the DOE would activate and transport their Nuclear Emergency Response Team (NEST) to the crisis site. The NEST focuses its response efforts in three major areas: (1) threat verification; (2) weapon disablement; and (3) search techniques to locate nuclear devices.¹¹⁷

DOS: The DOS is the designated lead agency in counterterrorism operations conducted abroad. During a crisis which threatens the US or her interests overseas, the DOS would coordinate the actions of the separate governmental agencies with the intent to delay, prevent or contain the employment of WMD in a terrorist incident. This coordination effort would be initiated by the immediate dispatch of a “fast reaction team” lead by an officer from the DOS Office of the Coordinator for Counterterrorism and consisting of experts from the DOD, CIA, FBI and other agencies as required.¹¹⁸ All other governmental agencies would be available to support the DOS efforts. If attacked by a nation state, or geographic entity, the role of the DOS, in addition to overseas counterterrorism, would also include the initiation of diplomatic efforts in support of the President’s response to the crisis.

FBI: In the event of an evolving domestic terrorist crisis involving WMD, the FBI would have overall control of the efforts to delay, prevent or contain the employment of WMD in a terrorist incident. All other governmental agencies would support FBI efforts.

LEAs: In the event of an evolving domestic terrorist crisis involving WMD, local LEAs would probably be the first on the scene and initiate the national response. Their actions early in the crisis could be the determining factor in delaying or preventing the employment of WMD.

Federal Emergency Management Agency (FEMA): Immediately upon notification of a potential incident involving WMD, the FEMA would begin planning the execution of the Federal Response Plan outlining responsibilities of all governmental agencies during a national crisis involving WMD. Additionally, the FEMA would dispatch crisis response teams to the threatened area in preparation to begin the Consequence Management process.

Intelligence Community: Immediately following the initiation of a crisis involving WMD, the Intelligence Community would be beset with an urgent demand for intelligence regarding the threat facing the nation. In response, the separate intelligence gathering agencies within the Intelligence Community would initiate operations to fulfill that demand.

Consequence Management

Definition: Both emergent and long term response to the detonation or introduction of a weapon of mass destruction. (Author definition).

Consequence Management: Discussion: This segment deals with the aftermath of an attack utilizing WMD, targeting the US or her interests. This response would entail mobilizing large numbers of local, state and national assets to deal with the effects of WMD. These assets would be coordinated by the FEMA. As the enormity of such an attack would most likely overwhelm local and state governments, FEMA would provide the national-level guidance, influence and

assets necessary to successfully deal with the long-term effects of either nuclear, chemical or biological weapons or agents.

Consequence Management: Roles:

President: Based upon the effects of the attack, the advice of the NSC and the FEMA director, the President will direct the necessary response.

FEMA: In response to an attack on the US involving WMD, FEMA would activate the Federal Response Plan dovetailing assets to meet requirements in an effort to save lives and minimize the destruction associated with the attack. FEMA is largely a coordinating agency utilizing national, state and local governmental assets and civilian contractors to accomplish their mission.

DOS: In response to an attack on the US involving WMD, the DOS would continue counterterrorism efforts abroad while also attempting to limit the diplomatic and economic impact such an attack would have on the US.

DOD: In the event of an incident involving WMD, the DOD would alert conventional air, ground, sea, space and Special Operations Forces in preparation for efforts to prevent additional employment of WMD against the US or her interests. The DOD would also alert, activate and transport NBC response teams to the crisis area.

CIA: no change from Crisis Response.

FBI: Following an incident involving WMD, the FBI would retain lead agency responsibilities until all investigatory processes had been completed. Upon notification of an incident the FBI would immediately initiate an investigation into the cause of the incident, intent on preventing further employment of WMD and to ensure the guilty parties are brought to justice.

Chapter Summary

The Counterproliferation Continuum provides a conceptual model upon which to base an understanding of the monumental efforts already underway in an attempt to counter the subject threat. These efforts, as will be discussed in later chapters, must be synchronized to the fullest extent possible to ensure the continued prevention of even one WMD related attack against the US.

The monumental efforts described in the Continuum are not currently formally linked by structure or organization. This lack of central direction results in wasted effort, ineffective utilization of scarce resources and increases the possibility of a successful attack against the US, employing WMD. Later chapters will further define the problem alluded to above and provide solutions to rectify it.

¹D. Douglas Broder, *Changing the Mind-set on Anti-Terrorism: Police Perspective* (Speech given during the DOD Terrorism Conference, Ft. Walton Beach FL, September 1996).

²John D. Holum, Untitled speech given to the National Strategy Forum in Chicago Illinois, 7 June, 1995.

³William J. Clinton, *National Security Strategy of Engagement and Enlargement* (Washington, DC: Government Printing Office, 1996), 16.

⁴William J. Clinton, *Executive Order 12938* (The White House: 14 November 1994)

⁵William J. Clinton (letter from the President of the United States to the Speaker of the House of Representatives and the President of the Senate. The White House: 12 November 1996).

⁶US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996), 43, 54.

⁷Ibid. iii.

⁸Ibid. iii.

⁹Ibid. iv.

¹⁰US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 47.

¹¹Counterproliferation Program Review Committee, *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 31.

¹²US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 50.

¹³Chairman of the Joint Chiefs of Staff, *National Security Strategy of the United States*, (Report by General J.M. Shalikashvili, Washington, DC: United States Government Printing Office, 1995), 3.

¹⁴Counterproliferation Program Review Committee, *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 58-63.

¹⁵US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 50.

¹⁶Counterproliferation Program Review Committee, *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 75.

¹⁷Counterproliferation Program Review Committee. *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 62.

¹⁸Counterproliferation Program Review Committee. *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 58-62.

¹⁹Ibid. 28.

²⁰Ibid. 28.

²¹US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 50.

²²Ibid. 50.

²³Ibid. 50.

²⁴Counterproliferation Program Review Committee. *Report on Activities and Programs for Countering Proliferation* (A report to Congress, Washington, DC: May 1996), 59.

²⁵US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 57.

²⁶Kessler, Christian J. *Verifying Nonproliferation Treaties: Obligation, Process and Sovereignty* (Washington, DC: National Defense University, October 95), 38.

²⁷US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 58.

²⁸The Center For Nonproliferation Studies, *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source: <http://cns.miis.edu/cns/invud95.html>.

²⁹Rick Maze, "Senate Ratifies Chemical Weapons Treaty," *Navy Times*, 5 May 1997, 10.

³⁰National Security Counsel Factsheet: *Chemical Weapons Convention*, Internet Source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets/cwc.html>, updated 7 October 1996.

³¹Institute for National Strategic Studies. *Strategic Assessment 1995: US Security Challenges in Transition*. Internet source: <http://198.80.36.91/ndu/inss/sa95/sa95cont.html>

³²Rick Maze, "Senate Ratifies Chemical Weapons Treaty," *Navy Times*, 5 May 1997, 10.

³³Arms Control and Disarmament Agency Factsheet, *Biological Weapons Convention (BWC)*. Internet source: <http://www.acda.gov/factsheet/wmd/bw/bwcover.htm>, created 12 November 1996.

³⁴The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source: <http://cns.miis.edu/cns/invud95.html>.

³⁵US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 56.

³⁶NSC Factsheet, *Reducing the Nuclear Threat*, Internet Source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets;nukes/html>. Updated 19 September 1996.

³⁷NSC Factsheet, *Reducing the Nuclear Threat*, Internet Source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets;nukes/html>. Updated 19 September 1996.

³⁸Saferworld, *Developing The Wassenaar Arrangement: A New Arms Export Control Regime*, September 1996. Internet source: <http://www.gn.apc.org/sworld/wassen.html>

³⁹US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 47.

⁴⁰Christian J. Kessler, *Verifying Nonproliferation Treaties: Obligation, Process and Sovereignty* (Washington, DC: National Defense University, October 1995), 27.

⁴¹Ibid. 27-28.

⁴²The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴³The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁴The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁵The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁶The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁷The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁸The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁴⁹The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁵⁰The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁵¹The Center For Nonproliferation Studies. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. Internet source:
<http://cns.miis.edu/cns/invud95.html>.

⁵²William J. Clinton (Statement by the President, Washington, DC: Released by The White House, Office of the Press Secretary, 24 April 1996).

⁵³Ibid.

⁵⁴Ibid.

⁵⁵Ibid.

⁵⁶Ibid.

⁵⁷US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 53-55.

⁵⁸Ibid.

⁵⁹National Security Council Fact Sheet, *Combating Terrorism* (28 September 1996). Internet Source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets/terror.html>

⁶⁰Ibid.

⁶¹Ibid.

⁶²Senator Arland Specter, *Combating Proliferation of Weapons of Mass Destruction Act of 1996* (Discussion within the Senate, 17 April, 1996). Internet source: http://www.fas.org/irp/congress/1996_cr/s960417c.htm

⁶³US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 61-62.

⁶⁴US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996). 62.

⁶⁵Ibid. 61.

⁶⁶Chairman of the Joint Chiefs of Staff. *Joint Publication 0-2, Unified Action Armed Forces (UNAAF)* (Washington, DC: Joint Chiefs of Staff, 24 February 1995), vii.

⁶⁷Department of Energy, *Executive Branch Arms Control and Nonproliferation Directory*, April 1995.

⁶⁸Department of Energy, *Executive Branch Arms Control and Nonproliferation Directory* (Washington, DC: DOE, April 1995).

⁶⁹Ibid.

⁷⁰Ibid. 11.

⁷¹Philip C. Wilcox, Jr. (DOS Coordinator for Counterterrorism), *Combating International Terrorism* (Testimony before the House of Representatives, Permanent Select Committee on Intelligence, Washington, DC: 5 March 1996).

⁷²Ibid.

⁷³Department of Energy, *Executive Branch Arms Control and Nonproliferation Directory* (Washington, DC: DOE, April 1995), 9.

⁷⁴Arms Control and Disarmament Agency Homepage, *ACDA's Mission*, Internet source: <http://www.acda.gov/aboutacd/hpmissto.htm>. Updated 3 October, 1996.

⁷⁵Ibid.

⁷⁶Department of Energy, *Executive Branch Arms Control and Nonproliferation Directory* (Washington, DC: DOE, April 1995), 9.

⁷⁷Ibid. 23, 25.

⁷⁸Ibid. 23, 25.

⁷⁹Ibid. 7.

⁸⁰Ibid. 7.

⁸¹Ibid. 37.

⁸²Ibid. 37.

⁸³Ibid. 35.

⁸⁴Ibid. 39.

⁸⁵Ibid. 39.

⁸⁶Edmund F. Scherr, *Counter-Terrorism Rewards Program Saves Lives*, United States Information Agency. Internet source: <http://www.heroes.net/report.html>

⁸⁷NSC Factsheet, *Reducing the Nuclear Threat*, Internet Source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets;nukes/html>. Updated 19 September 1996.

⁸⁸Philip C. Wilcox, Jr. (DOS Coordinator for Counterterrorism), *Combating International Terrorism* (Testimony before the House of Representatives, Permanent Select Committee on Intelligence, Washington, DC: 5 March 1996).

⁸⁹US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996), 48.

⁹⁰Ibid. 49.

⁹¹Ibid. 54.

⁹²Philip C. Wilcox, Jr. (DOS Coordinator for Counterterrorism), *Combating International Terrorism* (Testimony before the House of Representatives, Permanent Select Committee on Intelligence, Washington, DC: 5 March 1996).

⁹³Department of Energy, *Nonproliferation and National Security*, Internet source: http://apollo.osti.gov/budget/np_ns.html

⁹⁴Commission on the Roles and Capabilities of the United States Intelligence Community, Final Report, (Washington, DC: US Congress, 1 March 1996). Internet source: <http://www.library.cia/brown/int006.html>.

⁹⁵Ibid.

⁹⁶Ibid.

⁹⁷Ibid.

⁹⁸Ibid.

⁹⁹Ibid.

¹⁰⁰Ibid.

¹⁰¹Ibid.

¹⁰²Ibid.

¹⁰³Ibid.

¹⁰⁴Director of Central Intelligence, *A Consumers Guide To Intelligence* (Washington, DC: July 1995), 10.

¹⁰⁵Ibid.

¹⁰⁶Ibid.

¹⁰⁷Ibid.

¹⁰⁸Commission on the Roles and Capabilities of the United States Intelligence Community, Final Report, (Washington, DC: US Congress, 1 March 1996). Internet source: <http://www.library.cia/brown/int006.html>.

¹⁰⁹Director of Central Intelligence, *A Consumers Guide To Intelligence* (Washington, DC: July 1995), 13.

¹¹⁰Ibid. 12-13.

¹¹¹Ibid. 13.

¹¹²Ibid. 13.

¹¹³US Department of Defense, *Proliferation: Threat and Response* (Report by Secretary of Defense, William J. Perry, Washington DC: April 1996), 52.

¹¹⁴Ibid.

¹¹⁵Commission on the Roles and Capabilities of the United States Intelligence Community, Final Report,(Washington, DC: US Congress, 1 March 1996). Internet source:
<http://www.library.cia/brown/int006.html>.

¹¹⁶Blitzer, Robert M. (Chief, Domestic Terrorism/Counterterrorism planning section, National Security Division, Federal Bureau of Investigation in a hearing before the United States Committee on Governmental Affairs, Permanent Subcommittee on Investigations, Washington, DC: 22 March 1996).

¹¹⁷Douglas Waller, "Counterterrorism: Nuclear Ninjas", TIME Magazine, January 8, 1996, Volume 147, No.2.

¹¹⁸Philip C. Wilcox, Jr. (DOS Coordinator for Counterterrorism), *Combating International Terrorism* (Testimony before the House of Representatives, Permanent Select Committee on Intelligence, Washington, DC: 5 March 1996). Internet source:
http://www.fas.org/irp/congress/1996_hr/h960305w.htm

CHAPTER 6

ISSUES, DISCUSSION, AND RECOMMENDATIONS

We've got enough damned coordination in government now, too much in fact!¹

J. Edgar Hoover, circa 1969 (in response to efforts to improve the coordination between the FBI and the CIA)

One of the stated goals of this thesis was to lay the groundwork for follow-on research in the counterproliferation and counterterrorism arenas. This overarching goal was based on two observations. The first was a lack of available research on the subject matter. The second was the need to define the increasingly interwoven roles of the separate governmental agencies involved in the Counterproliferation Continuum. This definition of roles is a requisite to follow-on research. The accomplishment of this goal has consumed the bulk of the thesis to this point.

Prior to the summary of this thesis, this chapter explores several issues in an “issue, discussion and recommendation” format. The first issue answers the remaining subordinate research question regarding the “adequacy” of the current “command and control” (C2) structure and interagency agreements in countering the subject threat.

Following discussion of the C2 organization and structure, two other significant issues will be addressed. The first of these residual issues highlights the inability of local law enforcement agencies (LEAs) and emergency response units to deal with an incident involving WMD. The second issue consists of recommended areas for further research.

Issue: Are the current interagency relationships and “command and control” (C2) structures adequate to orchestrate the national assets necessary to counter this threat?

Discussion: Objectively, without proof to the contrary, the “adequacy” of the current system is determined by its effectiveness. As there have been no published, major terrorist incidents involving WMD in the US, the current arrangement must be effective, thereby establishing adequacy. Accordingly, the question of determining the adequacy of the current system must give way to identifying potential improvements to the existing system.

To lay the foundation for further discussion of potential improvements, a review of the current C2 and organizational structure is provided. Following this review, four proposals meant to optimize the structure, organizations and command relationships within the Counterproliferation Continuum will be discussed. Finally, the author's recommendation is offered.

Nonproliferation/Counterproliferation Command and Control Structure

The President is responsible for the formulation and implementation of policy regarding the nonproliferation and counterproliferation of WMD. The President is constitutionally empowered to “make treaties and appoint diplomatic and consular officials (with the advice and consent of the Senate), to receive foreign emissaries, and to exercise other authority provided by legislation.”² The National Security Council (NSC) and the Department of State (DOS) aids the President in these responsibilities. Additionally, the President has two Special Assistants dedicated to arms control and disarmament issues. The NSC advises the President on “the integration of domestic, foreign, and military policies relating to national security.”³ The Secretary of State is the principal advisor to the President in the formulation and conduct of foreign policy. Under these highest levels of command follow a host of governmental agencies, all exerting some sort of influence in US government nonproliferation efforts. Senator Specter, in the Congressional Record, asserts that 96 different governmental “entities” have some sort of authority over US

government nonproliferation efforts.⁴ This organization and structure, although adequate (based upon past and current results) is certainly not optimum.

Counterterrorism Command and Control Structure

The President is ultimately responsible for the effectiveness of the US counterterrorism effort, just as he is for the nonproliferation and counterproliferation efforts. The NSC supports the President in the fulfillment of his duties by providing him advice and counsel. Lead agency responsibility for the counterterrorism effort, below the NSC level, is divided between the DOS and the Federal Bureau of Investigation (FBI), through the Department of Justice (DOJ).⁵

The DOS is the lead agency for counterterrorism abroad while the FBI is the lead agency for domestic counterterrorism. Both of these agencies are supported by the remaining governmental agencies and the Intelligence Community in their efforts to combat terrorism.

The Major Shortcoming of the Current Systems

The major shortcoming of the current nonproliferation, counterproliferation and counterterrorism C2 organization and structure is the absence of one central, authoritarian body, directly and intimately involved in the process, that is directly responsible for US nonproliferation, counterproliferation and counterterrorism efforts. Below the NSC level, there is no one central authority in charge of routinely coordinating and managing the efforts of all the agencies involved in the Counterproliferation Continuum.

The causes for this lack of a central authority are many but focus on the historical necessity of preventing the employment of WMD between nation states and of countering terrorism during the cold-war. The current counterproliferation C2 organization and structure was established to conduct negotiations between nation states. Similarly, the current counterterrorism C2 organization and structure was largely designed to counter the threat of communist backed

terrorists and insurgencies. Cold-war terrorists armed with conventional weapons or explosives, although a danger to the US military and citizenry, did not constitute a threat to US national security. Accordingly, the separation of the various agencies was acceptable as their primary focus was on separate issues and threats. In short, the conditions of W.W.II and the cold war period that followed provided the basis for the current organizational and C2 structures.

Today, the conditions that produced and defined the post W.W.II and cold-war C2 and organizational structures have evolved, while the basic C2 structures have not. The threat has evolved beyond communist-backed aggression, intelligence collection, insurgencies and small-scale terrorism.

The danger posed by nation states and nonstate actors armed with WMD now represents a significant threat to the national security of the US. As defined by the President, the threat posed by the proliferation of WMD constitutes “an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States.”⁶ Clearly, the enormity of the threat requires careful scrutiny into any measure that could enhance the capability of the US government to counter it.

Three glaring examples of the interagency inefficiencies associated with the current structure include: (1) the internal distrust between the FBI and the CIA; (2) the splitting of responsibility for counterterrorism between the DOS and the FBI; and (3) the lack of central direction and coordination between the nonproliferation/counterproliferation efforts and the counterterrorism efforts.

The distrust and discord between the CIA and FBI are decades old, beginning with the birth of the forerunner of the CIA, the Coordinator for Intelligence (COI). The COI, then under William Donovan, was created to fill the need for an agency committed to overseas intelligence

collection and analysis. In June of 1942, the COI evolved into the Office of Strategic Services (OSS) and later into the Central Intelligence Agency.

The growth of the CIA threatened the Director of the FBI, J.E. Hoover. As a result he, and his bureau, retreated from interagency interaction.⁷ From this estranged beginning, the agencies grew amidst the civil disturbance and threat of the cold war period, separated by mission, threat, and institutional personality.

Today, these distinctly separate agencies are being drawn together by the threat posed by nonstate actors armed with WMD. Aside from the institutional distrust discussed above, the mutual reluctance to share intelligence is cause for much of the current friction between the CIA and the FBI.

The concern of the CIA, mainly an intelligence gathering arm of the government, is that any intelligence provided to the FBI could potentially be used in a court of law. This public usage of the specific, extremely detailed information required by the FBI would invariably compromise the CIA information source.⁸ The relevance of the CIA is dependent upon its ability to protect its sources, thus preserving the source of future information.

Conversely, the FBI, a law enforcement agency expected to make arrests and prosecute criminals, fears that information provided to the CIA will somehow leak and taint a case under prosecution. As a law enforcement agency, the success of the FBI is dependent upon detailed, documented evidence that will stand up in court and result in criminal convictions.

The resulting institutional friction caused by these two seemingly irreconcilable viewpoints, while understandable, does not represent the optimum counter to the subject threat.

The second shortcoming of the current system is the current division of responsibility for counterterrorism between the DOS (the lead counterterrorism agency overseas) and the FBI (the lead agency domestically). As the lead agency for counterterrorism abroad, the DOS sees its role

largely as a coordinator of counterterrorism assets overseas. Considering this observation, the primary justification for this lead agency designation appears to be the requirement to keep the ambassador and the DOS abreast of actions taken within a specific country. Despite the many interagency working groups intended to support the two-lead-agency structure arrangement, this structure remains inherently clumsy. Any process requiring two or more entities to approve an action cannot be as efficient and responsive as a single agency in charge of, and responsible for mission accomplishment.

The third major shortcoming of the current system is the lack of a unifying headquarters to better coordinate the efforts of both the nonproliferation and counterterrorism communities. As discussed in Chapter Five of this thesis, these two broad communities are inextricably linked through shared purpose and threat. Any potential synergistic effects between these two communities are dependent upon close coordination. Coordination between these two efforts would improve dramatically if both were under the control of one entity.

Proposed Changes to the Existing System

The need to reorganize national assets to meet this growing threat is a concern to many, both in and out of government. Offered below are a few of the more applicable proposals.

The first proposal, made law by inclusion into the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV), attempts to enhance the capabilities of the federal government to counter the threat posed by nation states or nonstate actors armed with WMD.⁹ Originally proposed by Senators Nunn, Lugar, Domenici, Graham, Lieberman and Specter, this proposal makes several specific recommendations to counter the threat. This proposal also includes several measures to improve the Crisis Response and Consequence Management (dealing with the consequences WMD employment against the US) segments of the

Counterproliferation Continuum.¹⁰ Of particular note in this proposal is the establishment of a National Coordinator On Nonproliferation. In addition to numerous other duties, this individual would also chair the National Security Council Committee on Nonproliferation. This committee would consist of the Secretary of State, Secretary of Defense, DCI, Attorney General, Secretary of Energy, Administrator of FEMA, Secretary of the Treasury, Secretary of Commerce and other such members as the President may direct. Adoption of this proposed amendment would ensure the consolidation and coordination of the Reduction and Prevention segments of the Counterproliferation Continuum and would also support the “Crisis Response” and “Consequence Management” segments.

A second, complementary proposal written by Senator Lugar expands the duties of the National Coordinator for Nonproliferation established under the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV). Under this proposal, the National Coordinator for Nonproliferation would also chair another committee within the NSC titled the Committee on Proliferation, Crime, and Terrorism. This committee would include the Secretaries of State, Defense, Justice, Energy, the DCI and any others the President may direct.¹¹ The chairman of these two committees would provide centralized direction for all agencies involved in the Counterproliferation Continuum.

The Honorable Morris D. Busby submitted a third proposal. Mr. Busby is a former US Ambassador to Columbia and served as the DOS Coordinator for Counterterrorism from 1989-1991.¹² This proposal was more general in nature and consisted of four general recommendations vice an overall solution. The first recommendation was for the President, Governors and the congress to make preparing for terrorism a national priority. Mr. Busby’s second recommendation is to clarify who is in charge of “the process,” clearly assigning missions to appropriate agencies and holding them accountable for their actions. The third recommendation was to “bridge the gap

between the domestic and international arenas..." and included the suggestion that this mechanism would require "White House" involvement. The fourth and final recommendation was to revamp the budgeting process ensuring the counterterrorism effort was adequately supported.

This series of recommendations authored by the Honorable Morris D. Busby, clearly identifies the need to reevaluate the missions assigned to all agencies contributing to the counterterrorism effort. This telling recommendation from a former DOS Coordinator for Counterterrorism must not go unheeded. Accordingly, an in-depth analysis of mission, capabilities and resource allocation should be mandated.

A fourth proposal made by the Commission on the Roles and Capabilities of the United States Intelligence Community, recommends the creation of a Global Crime Committee within the National Security Council.¹³ This committee would consist of the Secretaries of State and Defense, the Attorney General, and the Director of Central Intelligence (DCI) at a minimum. Further, the commission recommended the National Security Advisor chair the committee. This committee would focus specifically on those individuals, groups and organizations that pose a threat to national security. This identification of specific threats by the commission would "alert the various departments that their activities with respect to these threats should be conducted in coordination with other departments and agencies."¹⁴

Recommendation: The threat facing the US today is much different from the one it faced following the end of W.W.II, and more recently, the cold war. Most of the current law enforcement, counterterrorism and intelligence gathering organizations were formed in response to the threats of this earlier period. The primary threat to the US has changed and the C2 structure and organization must evolve to counter it.

The current nonproliferation/counterproliferation and counterterrorism C2 structures, when viewed from a military perspective, initially portray a mind-boggling disarray of effort. The

96 separate governmental “entities” identified by Senator Specter as having “some sort of authority” over US nonproliferation efforts serve to drive this point home.¹⁵

In addition to being unwieldy, the current C2 structure appears loosely coordinated; bound together by bandages of interagency working groups, oversight committees and commissions hastily applied to counter a rapidly expanding threat. Borrowing again from the military, the entire process defies one of the principles of warfare, Unity of Command.

Although it may be impossible, even disastrous to attempt to apply military logic and organization into the largely civilian controlled Counterproliferation Continuum, some principles do and should apply. A lack of unity of effort, in any arena, results in wasted resources, ineffective execution and does not optimize capabilities. Continuing success in preventing the employment of WMD against the US and her interests demands the optimization of all resources and assets at the governments disposal.

C2 decisions, when facing resource constraints, distill very quickly into three basic questions: (1) Who does the commander work for? (2) What is his primary mission? and (3) What guidance has his commander given him? The answer to these very basic questions instantly clarifies priorities, working relationships and focus of effort. The absence of these answers has created a dilemma for most of the agencies involved in countering this threat. In theory, on paper, each agency is clearly working for some entity. In actuality, the growing list of demands has challenged the agencies ability to satisfy both these new taskings and their primary missions, muddying an already inherently unclear C2 structure. Most of the agencies involved in the Counterproliferation Continuum and their primary missions, are products of the post-W.W.II, Cold War era. Many would argue that these missions and the corresponding organizational structure should change.

What follows are two proposals to reorganize assets and provide focus to US national efforts to counter this threat. These two proposals represent a range of solutions to the current lack of organizational focus. The first proposed solution follows along the provisions of the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV, which created the position of National Coordinator on Nonproliferation), adding the complimentary recommendation by Senator Lugar which would provide one central authority overseeing both the nonproliferation and global crime (including terrorism) arenas. This proposal would provide better coordinated oversight without requiring major agency reorganization.

The second recommendation requires a reorganization of governmental agencies, suggesting the establishment of functional or geographic “Directorships,” much like DOD Commander-in-Chiefs (CINCs). These “Directorships” would be responsible for specific functional areas with the parent agencies being the “asset providers.”

The first, and least preferred of these two proposals, combines the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV), and the Lugar proposal discussed above, attempting to rectify the lack of organizational focus in the current C2 structure. This proposal provides a coordinated focus through the creation of two committees within the National Security Council. These two committees, both chaired by the same individual, would cover the entire span of the Counterproliferation Continuum discussed in Chapter Five of this thesis, in addition to other areas of global crime. These two committees, the Nonproliferation Committee and the Committee on Global Crime, would provide focus and oversight on the threats facing the US.

If this proposal were adopted, four additional recommendations are offered to ensure the coordination of effort between all affected agencies. The first is that all nonproliferation, counterproliferation and counterterrorism agencies should answer directly to the two commissions

established by the amendment. Secondly, the individual designated as National Coordinator for Nonproliferation and the chairman of the Committee on Global Crime must be provided with a suitable staff to discharge his responsibilities. Third, the counterterrorism and counterproliferation arms of the FBI, CIA and DOS must be made directly answerable to this chairman. Further, this chairman and his staff should adopt a “warfighting,” vice an administrative, managerial focus.

This engaged focus, directing the efforts of these three agencies, will induce a synergistic effect between the involved agencies. Finally, within eighteen months of establishing these two committees, the chairman will provide to the President a detailed analysis of the current and projected threats to US national security, current US capabilities and projected requirements to counter the subject threats. This report will specifically focus on recommended changes to the overall governmental organizational and C2 structure necessary to optimize efforts to counter this threat to US national security.

The advantage to the first proposal is that it would require fewer changes in the existing structure, thus creating less friction. The challenge associated with any change to a system is to implement change without temporarily damaging current capabilities. Recommendations should therefore be gradual enough to minimize organizational turbulence and flexible enough to allow the C2 system to adapt to the ever-evolving threat. The creation of the two committee oversight system, along with the requirement to produce a report of recommended changes to the overall structure would produce gradual change and potential improvement to the existing system.

The disadvantages to this proposal are: (1) real change would come too slowly and (2) proposal would result in little change at the grass roots level. This lack of change at the “worker-bee” level would not break the parochial mindsets of the separate agencies and the central authority would be too far removed to effect the required changes.

The authors recommendation takes into account the current situation consisting of separate governmental agencies with no central direction, a complex hierarchy of C2 responsibilities and requirements and a bewildering array of “warfighting” responsibilities placed upon these separate agencies, which cannot fulfill these responsibilities without coordination and assistance from several other agencies.

These conditions mirror that of the US military prior to the reorganization into the current system of warfighting, geographically oriented Commanders in Chief (CINCs), taking direction from the NCA, and supported by the separate services. This reorganization of the DOD, first implemented in 1947 and amended in 1958 and again in 1986, served to override interservice rivalries and parochialism, providing the means to focus on the threats facing the US. The regional CINCs focus assets and resources on the threats facing the US while the separate services are relegated to the roll of force providers.

This recommendation reorganizes selected governmental agencies along the lines of the DOD. The end state would be the creation of geographic or functional “Directorships,” mirroring the structure and responsibilities of the DOD CINCs.

If organized along geographic lines, the geographic Director would be responsible for specific functional areas within his assigned geographic area. For example, all counterterrorism, counterdrug, countercrime, and counterproliferation assets (CIA, FBI, Intel Community, even selected DOS functions), employed in, or focused on the European theater would be controlled by the designated geographic Director. Likewise, a geographic Director would be assigned responsibility for employing all counterterrorism, counterdrug, counterproliferation and countercrime assets within the US.

The creation of a Directorship independent of the separate agencies, but with control of their assets would force a more inter-agency approach to countering these threats to the security of the US.

If organized along functional lines, the functional Directors would be responsible for specific functions such as counterterrorism, counterproliferation or counterdrug operations. For example, the responsibility of the Counterterrorism Director would be worldwide and focused solely on counterterrorism. The Counterterrorism Director would then control all of the counterterrorism assets of the separate governmental agencies. In this example, the Director for Counterterrorism would be responsible for employing multi-agency counterterrorism assets worldwide. Thus, the Director for Counterterrorism would have elements of the FBI, CIA and other organizations assigned to him and would employ them in accordance with established policy and to meet the needs of his assigned functional area.

Of the two options presented above, the geographic, vice the functional, Directorships seem to provide the most efficient organizational and C2 structure, with clearly delineated lines of responsibility.

Regardless of the organization of the Directorships, the parent agencies (DOJ, FBI, CIA, DOS, etc.) would become asset providers, responsible for training and equipping the "assets" (the agents of these separate agencies), much like the separate military services provide forces to the CINCs today. Under this proposal, the Directors would be totally responsible for "warfighting," directing the efforts of the assets (interagency forces) assigned to counter the designated threat within their designated areas of responsibility. These Directors would be responsible to a central authority directing the overall efforts of "participating" agencies. This central authority would be on a par with the Secretary of Defense and could be titled the "Secretary of National Security."

The division of responsibilities between the “force providers” (the parent agencies) and the Directorships would assist in crushing the bureaucratic, parochial mindsets which are the cause of much friction and inefficiency inherent in the current system. However, just as in the DOD, this division of responsibilities of the functional CINCs and the parent agencies must be firmly based in law and the functional “CINCs” must be empowered with the authority to carry out their assigned responsibilities.

Advantages of creating geographic or functional “Directorships” include:

1. Reduction in institutional and interagency friction by forcing “joint” operations between the separate agencies under the auspices of the “Directorship.”
2. Reduced uncertainty associated with reorganization as model is built upon existing DOD example.
3. Clearly delineated responsibilities of Director and supporting parent agencies, providing clear focus and uninhibited support for interagency “task forces.”
4. Subtly wrests some power and authority from the separate agencies and empowers the Directors, the executors of national policy, with “joint” forces focused on a specific problem.
5. Provides focused capability to meet the current threat and the flexibility to adapt to the threats of tomorrow (through the simple reallocation of assets to the geographic or functional directorships).

The major, apparent disadvantage to this proposal is the temporary turbulence associated with reorganization.

Clearly this proposal, as presented, is neither detailed nor all inclusive. Remaining questions include the nature of the Directorships and the definition of a central authority to which these geographic or functional Directors answer to. Additionally, the roles of the DOS and the parent agencies need detailed definition and are clearly beyond the scope of this thesis.

Issue: Concerns Over the Ability of Local LEA and Emergency Response Units to Deal with a Terrorist Attack Utilizing WMD.

Discussion: Although this issue was addressed in the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV), the concerns raised in this issue are noteworthy.

The first echelon of emergency response to an incident involving WMD will be the local law enforcement and emergency medical response agencies. Current writings indicate that the levels of preparedness of these organizations to deal with the results of such an incident are either inadequate or nonexistent.¹⁶ Several exercises noted difficulties resulting from interagency turf battles (most notably between the FBI and local agencies) and a total ignorance of the threat, and the tactics, techniques and procedures necessary to deal with it. In several exercises in major cities, emergency medical responders, police and fire department personnel were "killed" in great numbers due to ignorance of the killing radius of chemical and biological agents.¹⁷ One option to prepare local agencies to deal with an incident involving WMD range is to train 50 emergency responders from each of the 120 largest cities. Another identified option is to train regional "strike teams" which are trained and equipped to respond to incidents involving WMD.¹⁸

Is it enough to say, as have many, that the odds of actual WMD employment are so low, that such training is not worth the expense, especially in times of fiscal austerity? Additional questions include who should provide the specialized training and who would pay for it?. Currently, there are few if any assets or personnel dedicated to Crisis Response or Consequence Management in the major cities of the US, let alone its smaller communities.

Recommendation: That the Federal Emergency Management Agency (FEMA) be designated as the lead agency in establishing a suitable course of instruction to be taught locally to educate emergency response agencies (police, emergency medical services, fire departments, etc.) on the

tactics, techniques and procedures associated with WMD. This course would focus on the techniques and procedures associated with an incident involving WMD. These classes would utilize the “Train the Trainer” concept and include agent and symptom identification, “spread patterns” and immediate post-incident procedures to reduce loss of life. Additionally, FEMA should coordinate regional response teams, prepared and equipped to respond to emergencies within their respective regions. Additionally, city and agency leadership should be aware of the support requirements of these regional response teams and be prepared to provide it.

Issue: Recommended Areas For Further Study

Discussion/Recommendation: Recommended topics for further study include:

1. Conducting an analysis of the current C2 structure of the counterproliferation and counterterrorism processes to determine the optimal structure and organization required to counter the current threats to national security. The recommendations listed earlier in this chapter relating to this issue do not represent a detailed analysis of this issue. Recommendations include researching the evolution of the current DOD structure, especially concerning the creation of the geographic and functional “CINCdoms.” A study of the “war on drugs” would provide an example of what worked and did not work inside the bureaucracy of governmental agencies. The resulting study could ultimately provide the basis for change.
2. Research to determine the optimum training and capabilities required of local law enforcement and emergency response agencies to adequately deal with incidents involving WMD. In conducting this research, the recommended focus is in determining the minimum response capability required, how much expertise is necessary, who could provide the training, at what cost and who would pay for it. An additional recommendation is to analyze the role the military may have in assisting in this effort.

¹Mark Riebling, *Wedge* (New York: Alfred A. Knopf, 1994), 284.

²Department of Energy, *Executive Branch Arms Control and Nonproliferation Directory* (Washington, DC: Department of Energy, April 1995), 3.

³Ibid. 5.

⁴Senator A.T. Specter, *Combating Proliferation of Weapons of Mass Destruction Act of 1996*, Senate-17 April 1996. p S3488. Internet source: http://www.fas.org/irp/congress/1996_cr/s960417c.htm

⁵ Philip C. Wilcox, Jr. (DOS Coordinator for Counterterrorism), *Combating International Terrorism* (Testimony before the House of Representatives, Permanent Select Committee on Intelligence, Washington, DC: 5 March 1996). Internet source: http://www.fas.org/irp/congress/1996_hr/h960305w.htm

⁶William J. Clinton. *Message to the Congress on Weapons of Mass Destruction* (Washington, DC: The White House, 8 November 1995).

⁷Mark Riebling, *Wedge* (New York: Alfred A. Knopf Inc., 1994), 1-79.

⁸Morris D. Busby, (Testimony before the United States Senate Permanent Subcommittee on Investigations Committee on Governmental Affairs: 27 March 1996). Internet source: <http://www.counterterrorism.com/busby.htm>.

⁹US Congress, "National Defense Authorization Act of 1997 (Public Law 104-201), title XIV: Defense Against Weapons of Mass Destruction," *U.S. Code, Congressional and Administrative News*, 104th Congress, No. 9 (St. Paul, MN: West Publishing Company, November 1996)

¹⁰Senator Nunn, and others, *Proposed Amendment NO. 4349 to the Constitution of the United States* dated 26 June 1996. Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>

¹¹Senator Richard G. Lugar, *Weapons of Mass Destruction and Cooperative Threat Reduction*, written remarks given at the Nuclear Roundtable, 29 April, 1996. Internet source: <http://www.stimson.org/pub/stimson/pub/stimson/rd-table/lugar.htm>

¹²Morris D. Busby, (Testimony before the United States Senate Permanent Subcommittee on Investigations Committee on Governmental Affairs: 27 March 1996). Internet source: <http://www.counterterrorism.com/busby.htm>.

¹³Commission on the Roles and Capabilities of the United States Intelligence Community, Final Report(Washington, DC: US Congress, 1 March 1996). Internet source: <http://www.library.cia/brown/int006.html>.

¹⁴Ibid.

¹⁵Senator A.T. Specter, *Combating Proliferation of Weapons of Mass Destruction Act of 1996*, Senate-17 April 1996. p S3488. Internet source:
http://www.fas.org/irp/congress/1996_cr/s960417c.htm

¹⁶Steve Macko, "Senate Hearings Say Local Fire and Emergency Services Not Prepared...," *Emergency Net NEWS Service*, (EENFAX), 30 March 1996.

¹⁷Ibid.

¹⁸Ibid.

CHAPTER 7

SUMMARY

The real question is whether the political will exists to develop and implement a national security strategy that responds appropriately to the post-Cold War threat posed by the proliferation of weapons of mass destruction.¹

Senator Richard G. Lugar

This thesis discusses the threat to national security posed by nation states and nonstate actors armed with WMD. This threat is real, growing, and demanding increased attention. Recent terrorist activity, both in the US and abroad, has highlighted the capability and willingness of individuals, groups or entities to cause great death and destruction to further their aims. WMD allows nation states and nonstate actors alike to increase the lethality of their attacks against the US a thousandfold.

Countering this threat requires the seamless synchronization of all governmental nonproliferation, counterproliferation, and counterterrorism efforts and agencies. These seemingly independent efforts, separated by C2 organization and structure, are inextricably linked by purpose and threat. This intricate and complex linkage is explained in this thesis and illustrated in the Counterproliferation Continuum.

The Counterproliferation Continuum defines and explains the basic functional areas and actions undertaken by numerous governmental agencies to counter this threat. The Counterproliferation Continuum consists of ten functional segments: Dissuasion, Prevention,

Deterrence, Reduction, Defense, Intelligence, Attack, Retaliation, Crisis Response, and Consequence Management. The roles of the major, separate governmental agencies throughout the Continuum are defined in Chapter 5 of this thesis. The complex linkage binding the efforts of the numerous participating governmental agencies in countering the subject threat is perhaps the greatest finding of this paper.

Another finding of note was a shortcoming in the mechanism synchronizing the efforts of the separate governmental agencies to counter this threat. Although adequate, the C2 and supporting structures are not optimum. The current organizational and C2 structures were created in the period from the early 1940s to the present in order to protect the national security of the US against the threat posed by nation states. During this period, nation states posed the greatest threat to the national security of the US. Today, at least temporarily, the threat of WMD, wielded by nation states and nonstate actors, has eclipsed that posed by the conventional warfare capabilities of nation states.

This temporary respite from conventional threats has been generated by the perceived US supremacy in conventional warfare as evidenced by the 1990-91 Gulf War. Additionally, the ability of the US to respond to actual or threatened WMD employment has greatly limited the threat posed by nation states armed with WMD. However, the capability and threat of retaliation is irrelevant when facing a nonstate actor armed with WMD. Thus, the greatest single threat to the national security of the US is now an individual, group, or organization armed with WMD which has no apparent affiliation to a nation state.

In response, numerous governmental working groups, interagency agreements, and oversight committees have been formed to more efficiently coordinate governmental efforts to counter this threat. These efforts are necessary primarily due to outdated, inefficient

organizational C2 and supporting structures. Current governmental organizational and C2 structures were designed to counter competing nation states, then the primary threat of the period.

In short, the threat has evolved while governmental organizational and C2 structures have not. Change is inherently difficult; change in a bureaucracy is practically impossible. Chapter 6 offered two proposals to optimize governmental capabilities to counter the threat posed by nation states and nonstate actors armed with WMD.

The first proposal, largely encapsulated under the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201, title XIV), discussed in Chapter 6, creates a common hierarchy for the major agencies involved in both the counterproliferation and counterterrorism arenas. This "common master" concept is intended to improve interagency coordination and reduce friction, thereby improving US capabilities to counter the threat.

This proposal does not go far enough in restructuring the governmental C2 structure to realize the US's potential capability to counter the subject threat. To focus on an organizational change without risking decreased capability, an additional recommendation is to conduct research into reorganizing governmental agencies to counter the primary threat of this period.

The author's recommendation reorganizes governmental agencies along DOD lines, mirroring the geographic CINC concept. This proposal would create geographic or functional "Directorships." A geographic directorship would be responsible for several designated threats in a specific geographic region. A functional directorship would be responsible to counter one designated threat, for example, counterterrorism, worldwide.

Another major finding of this paper was the lack of preparedness of local government, LEAs, and emergency response teams to deal with a terrorist incident involving WMD. This universal shortcoming is addressed in a presidential report to the Congress entitled "Report on Government Capabilities to Respond to Terrorist Incidents Involving Weapons of Mass

Destruction—Message From the President of the United States” dated 26 February 1997. This report outlines several initiatives currently underway to rectify this shortcoming, better preparing “first responders” to deal with a WMD incident.

Finally, this thesis identifies and recommends several issues for further study. These issues are detailed in Chapter 6 of this thesis.

Currently, the threat posed by nonstate actors armed with WMD represents the greatest single danger to national security. These terrible weapons empower a small group or even an individual with the potential to radically affect the security and economy of the US or its interests. Due to the potential for great amounts of death and destruction, the evolution of governmental efforts to counter this threat is inevitable.

Change to current C2 organization and structure will either come from within, dictated by visionary leadership, or it will be forced upon the US following an attack. This attack will be conducted by an enemy wielding WMD who was neither seen nor heard prior to the employment of his deadly tools.

To date, there have been monumental efforts, at every level in the US government to counter the threat posed by nonstate actors armed with WMD. The complexity of the Counterproliferation Continuum, detailed in Chapter five of this thesis, attempts to illustrate the extent of those efforts.

These efforts, however monumental, will be for naught if they do not prevent every potential attack against the US. One successful incident could potentially cause grievous damage to US social, economic, and political infrastructure.

This zero-tolerance for terrorist success requires all governmental agencies to function in perfect synchronization. Currently, the US government is not optimally structured to most

effectively counter this threat. US agencies involved in this process lack organizational focus on the overall threat, too often involved in interagency turf battles.

The threat described in this thesis is real, the WMD are real and available should a nonstate actor or nation state decide to acquire and use them. The organizational and interagency problems described in this thesis are likewise real and must be resolved. One successful attack employing WMD against the US could significantly damage the US and change the status of world affairs. This attack must never be conducted.

¹Senator Richard G. Lugar, *Weapons of Mass Destruction and Cooperative Threat Reduction* (Written remarks given at the Nuclear Roundtable, 29 April 1996). Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>

BIBLIOGRAPHY

Books

Allison, Graham T., Owen R. Cote Jr., Richard A. Falkenrath, and Steven E. Miller, *Avoiding Nuclear Anarchy: Containing The Threat of Loose Russian Nuclear Weapons and Fissile Material*. Cambridge: MIT Press, 1995.

Bodansky, Yossef.. *Target America: Terrorism in the U.S. Today*. New York: S.P.I. Books, 1993.

McPhee, John. *The Curve of Binding Energy*. New York: Farrar, Strause, and Giroux, 1974.

Reich, Walter. *Origins of Terrorism*. Cambridge, MA: Cambridge University Press, 1990.

Riebling, Mark. *Wedge*. New York: Alfred A. Knopf Inc., 1994.

Taheri, Amir. *Holy Terror*. Bethesda, MD: Alder and Alder Publishers, Inc., 1987.

Government Documents

Arms Control and Disarmament Agency. *ACDA's Mission*. ACDA Homepage. Internet source: <http://www.acda.gov/aboutacd/hpmisso.htm>. Updated 3 October, 1996.

Arms Control and Disarmament Agency. Factsheet: *Biological Weapons Convention (BWC)*. Internet source: <http://www/acda/gov/factsheet/wmd/bw/bwcover.htm>, created 12 November 1996.

Chairman of the Joint Chiefs of Staff. *Joint Publication 0-2, Unified Action Armed Forces (UNAAF)*. Washington, DC: DOD, 24 February 1995.

Chairman of the Joint Chiefs of Staff, *National Military Strategy of the United States of America 1995*. Washington, DC: DOD, 1995.

Chairman of the Joint Chiefs of Staff. *Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms*. Washington, DC: The Joint Staff, 23 March 1994.

Chairman of the Joint Chiefs of Staff. *Joint Publication 3-05: Doctrine For Joint Special Operations*. Washington, DC: The Joint Staff, 28 October 1992.

Commission on the Roles and Capabilities of the United States Intelligence Community. *Final Report*. Washington, DC: 1 March 1996. Internet source:
<http://www.library.cia/brown/int006.html>

Commission on the Roles and Capabilities of the United States Intelligence Community. *The Need For a Coordinated Response to Global Crime*, Washington, DC: Government Printing Office, retrieved from the Internet February 1997. Internet source:
http://www.gpo.gov/su_docs/dpos/epubs/int/int008.html.

Clinton, William J. *National Security Strategy of Engagement and Enlargement*. Washington, DC: US Government Printing Office. 1996.

Clinton, William J. Text of a letter from the President of the United States to the Speaker of the House of Representatives and the President of the Senate. Washington, DC: The White House, 12 November 1996.

Clinton, William J. *Executive Order 12938*. Washington, DC: The White House, 14 November 1994.

Clinton, William J. Statement by the President concerning the *Antiterrorism and Effective Death Penalty Act of 1996*. Washington, DC: Released by The White House, Office of the Press Secretary, 24 April 1996.

Clinton, William J. *Message to the Congress on Weapons of Mass Destruction*, Washington, DC: The White House, 8 November 1995.

Counterproliferation Program Review Committee. *Report on Activities and Programs for Countering Proliferation*. Washington, DC May 1996.

Director of Central Intelligence. *A Consumers Guide To Intelligence*. Washington, DC: CIA, July 1995.

Institute for National Strategic Studies. *Strategic Assessment 1995: US Security Challenges in Transition*. Internet source: <http://198.80.36.91/ndu/inss/sa95/sa95cont.html>

National Security Counsel. Factsheet: *Chemical Weapons Convention*. Washington, DC: Updated on the Internet 7 October 1996. Internet source:
<http://www.whitehouse.gov/WH/EOP/NSC/factsheets/cwc.html>.

National Security Counsel. Factsheet: *Combating Terrorism*. Washington, DC: Updated on the Internet 28 September, 1996. Internet source:
<http://www.whitehouse.gov/WH/EOP/NSC/factsheets/terror.html>.

National Security Counsel. Factsheet: *Reducing the Nuclear Threat*. Washington, DC: Updated on the Internet 19 September 1996. Internet source: <http://www.whitehouse.gov/WH/EOP/NSC/factsheets/nukes.html>.

Nunn, Lugar, Domenici, Graham, Lieberman, Specter. *Proposed Amendment NO. 4349 to the Constitution of the United States*. Washington, DC: United States Senate, 26 June 1996.
Internet source: <http://www.stimson.org/pub/stimson/rd-table/lugar.htm>.

Perry, William J. US Department of Defense. *Proliferation: Threat and Response*. Washington DC: DOD, April, 1996.

Sloan, Steven. "Terrorism: How Vulnerable is the United States?" From "Terrorism: National Security Policy and the Home Front." Carlisle Barracks, Pennsylvania: Strategic Studies Institute, US Army War College, May 1995.

US Department of Energy. *Executive Branch Arms Control and Nonproliferation Directory*. Washington, DC: Department of Energy, April 1995.

US Department of Energy. *Nonproliferation and National Security*. Washington, DC: Retrieved from the Internet February, 1997. Internet source:
http://apollo.osti.gov/budget/np_ns.html.

United States Senate. Hearing Before the Permanent Subcommittee on Investigations investigating: *The Global Proliferation of Weapons of Mass Destruction*. Washington, DC: 13-27 March 1996.

United States Senate. Hearing Before the Permanent Subcommittee on Investigations investigating: *The Global Proliferation of Weapons of Mass Destruction*. Washington, DC: 31 October and 1 November 1996.

United States Senate. Discussions by Senator A.T. Specter concerning: *Combating Proliferation of Weapons of Mass Destruction Act of 1996 (p S3488)*. Washington, DC: 17 April 1996.
Internet source: http://www.fas.org/irp/congress/1996_cr/s960417c.htm..

Periodicals and Articles

Barnaby, Frank. "Nuclear Accidents Waiting To Happen." *The World Today*, April 1996.

Cameron, Gavin, "Nuclear Terrorism: A Real Threat?" *Jane's Intelligence Review*, September, 1996.

Cole, Leonard A.. "The Specter of Biological Weapons," *Scientific American*, December 1996.

Kupperman, Robert. "The Destructive Potential of Criminal Arsenals." *Harvard International Review*, Summer 95, Vol. 17.

Macko, Steve. "Senate Hearings Say Local Fire and Emergency Services Not Prepared...." *Emergency Net NEWS Service*, (EENFAX). 30 March 1996.

Nelan, Bruce W. "The Price of Fanaticism." *Time*, 3 April 1995.

- Spector, Leonard S. "Neo-nonproliferation." *Survival*, vol. 37, spring 1995.
- Starr, Barbara. "Chemical and Biological Terrorism." *Jane's Defense Weekly*, 14 August 1996.
- Unknown. "A Cloud of Terror--And Suspicion." *Newsweek*, 3 April 1995.
- Waller, Douglas. "Counterterrorism: Nuclear Ninjas." *TIME Magazine*, volume 147, No. 2. January 1996. 8
- Wege, Carl Anthony. "Hizbollah Organization." *Studies in Conflict and Terrorism*, vol. 17.
- Wright, Robert. "Be Very Afraid." *The New Republic*, 1 May 1995.
- Yamaguichi, Mari. "Japan Sect Showed Doomsday Interest in the Ebola Virus." *San Francisco Examiner*, 24 May 1995.

Internet Sourced Materials

Kadlec, Robert P. "Biological Weapons for Waging Economic Warfare, *Battlefield of the Future*. Internet source: <http://www.cdsar.af.mil/battle/chp10.html>. Retrieved from the Internet January 1997.

Mayer, Terry N. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction," *Battlefield of the Future*. Internet source: <http://www.cdsar.af.mil/battle/chp8.html>. Retrieved from the Internet January 1997.

Scherr, Edmund F. *Counter-Terrorism Rewards Program Saves Lives*. United States Information Agency. Internet source: <http://www.heroes.net/report.html>

Unknown. *The CWC Chronicle*, Volume I, Issue 8. The Henry L. Stimson Center. Internet source: <http://www.clark.net/pub/stimson/cwc/chron8.htm>. September, 1995.

Unknown. *First Anniversary of Tokyo Subway Poison Gas Attack: Is the US Prepared for a Similar Attack?* The Henry L. Stimson Center News Advisory, retrieved from Internet April 1997. Internet source: <http://www.clark.net/pub/stimson/cwc/issuebrf.htm>.

Unknown. *Inventory of International Nonproliferation Organizations and Regimes: 1995 Edition*. The Center For Nonproliferation Studies, retrieved from the Internet February 1997. Internet source: <http://cns.miis.edu/cns/invud95.html>.

Unknown. *Developing The Wassenaar Arrangement: A New Arms Export Control Regime*. Saferworld, September 1996. Internet source: <http://www.gn.apc.org/sworld/wassen.html>. Retrieved from the Internet March 1997.

Unpublished Materials

Hanley, Theodore R. *Hamas: Will a Nuclear Weapon be in it's Arsenal?* Master's thesis written in partial fulfillment of a Master of Science of Strategic Intelligence at the Joint Military Intelligence College. August 1995.

Hoffman, Bruce. *Responding to Terrorism Across the Technological Spectrum.* Carlisle Barracks, PA: US Army War College, July 1994.

Kessler, Christian J. *Verifying Nonproliferation Treaties: Obligation, Process and Sovereignty.* Washington, DC: National Defense University, October 95.

Specter, Arland. Discussion within the Senate regarding the, *Combating Proliferation of Weapons of Mass Destruction Act of 1996.* 17 April 1996. Internet source: http://www.fas.org/irp/congress/1996_cr/s960417c.htm..

Unknown. *Chemical and Biological Weapons Deterrence Study,* Arlington, VA: Anser Research Institute, 1995.

Other Sources

Blitzer, Robert M. (Chief, Domestic Terrorism/Counterterrorism planning section, National Security Division, Federal Bureau of Investigation). Testimony given in a hearing before the United States Committee on Governmental Affairs, Permanent Subcommittee on Investigations, Washington, DC: March 22, 1996

Bodrero, Douglas D. *Changing the Mindset on Anti-Terrorism—A Police Perspective.* Speech presented to the DOD Terrorism Conference, Ft. Walton Beach FL, September 1996.

Busby, Morris D. Testimony presented before the United States Senate Permanent Subcommittee on Investigations: Committee on Governmental Affairs. Washington, DC: 27 March 1996 Internet source: <http://www.counterterrorism.com/busby.htm>.

Center for Strategic and International Studies (CSIS) report: *The Nuclear Black Market,* Washington, DC: CSIS, 1996.

Defense Group Incorporated. A White Paper written for the Secretary of Defense entitled: *Countering Proliferation: A National Emergency.* Falls Church, VA: Date unknown.

Deutch, John M. Untitled speech given to the Conference on Nuclear, Biological, Chemical Weapons Proliferation and Terrorism. 23 May 1996.

Holum, John D. Untitled speech given to the National Strategy Forum in Chicago Illinois, 7 June 1995.

Lugar, Senator Richard G. *Weapons of Mass Destruction and Cooperative Threat Reduction.*

Written remarks given at the Nuclear Roundtable, 29 April 1996. Internet source:

<http://www.stimson.org/pub/stimson/pub/stimson/rd-table/lugar.htm>

Wilcox, Philip C. Jr. (Coordinator for Counterterrorism, Department of State). *Combating International Terrorism.* Testimony before the House of Representatives, Permanent

Select Committee on Intelligence, Washington DC: DOS, March 5, 1996. Internet source:

http://www.fas.org/irp/congress/1996_hr/h960305w.htm

INITIAL DISTRIBUTION LIST

1. Combined Arms Research Library
U.S. Army command and General Staff College
Fort Leavenworth, KS 66027-6900
2. Defense Technical Information Center
Cameron Station
Alexandria, VA 22314
3. Marine Corps Staff College
Breckenridge Library
MCCDC
Quantico, VA 22134
4. LTC Curt F. Weimer
DJCO, USACGSC
1 Reynolds Avenue
Fort Leavenworth, KS 66027-6900
5. COL E.M. Pitt, Jr.
3021 Lucille
Ashland, KY 41102
6. LTC D. Gilbert
Center for Army Leadership
USACGSC
1 Reynolds Avenue
Fort Leavenworth, KS 66027-6900
7. Richard Wright
CDD, USACGSC
1 Reynolds Avenue
Fort Leavenworth, KS 66027-6900
8. Chief, Special Operations Division
J-38/SOD
The Joint Staff
Pentagon Rm 2C840
Washington, DC 20318-3000

9. Dr. Robert L. Pfaltzgraff, Jr.
President
Institute for Foreign Policy Analysis
Central Plaza Building, Tenth Floor
675 Massachusetts Avenue
Cambridge, MA 02138
10. Dr. John Rechart
Deputy Director
Counterproliferation Research
National Defense University
Building 62, Room 211
Ft. McNair
Washington, DC, 20319-5062
11. Dr. Kamal A. Beyogluw
Director, Strategic Level of War Course
USMC Command and Staff College
6015 North 35th Street
Arlington, VA. 22207
12. Dr. Robert G. Joseph
Director of Operations
Counterproliferation Research
National Defense University
Building 62, Room 211
Washington, DC, 20319-5062
13. Dr. Andrew L. Ross
Professor of National Security Affairs
National Security Decision-Making
Department
Naval War College
Newport, RI 02841-5010

CERTIFICATION FOR MMAS DISTRIBUTION STATEMENT

1. Certification Date: 6/June/1997
2. Thesis Author: Major S. Cottrell, United States Marine Corps
3. Thesis Title: Identifying the Roles of the Separate Governmental Agencies in Countering the Proliferation of Weapons of Mass Destruction (WMD) Among Nonstate Actors Throughout the Counterproliferation Continuum.

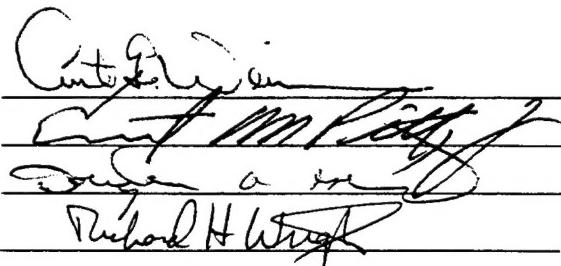
4. Thesis Committee Members

Signatures: LTC C.F. Weimer

COL E.M. Pitt, Jr.

LTC D.A. Gilbert

Richard H. Wright



5. Distribution Statement: See distribution statements A-X on reverse, then circle appropriate distribution statement letter code below:

A B C D E F X SEE EXPLANATION OF CODES ON REVERSE

If your thesis does not fit into any of the above categories or is classified, you must coordinate with the classified, you must coordinate with the classified section at CARL.

6. Justification: Justification is required for any distribution other than described in Distribution Statement A. All or part of a thesis may justify distribution limitation. See limitation justification statements 1-10 on reverse, then list, below, the statement(s) that applies (apply) to your thesis and corresponding chapters/sections and pages. Follow sample format shown below:

S	SAMPLE	SAMPLE	SAMPLE	SAMPLE	S
A	Limitation Justification Statement / Chapter/Section	/	Page(s)	/	A
M					M
P	Direct Military Support (10)	/ Chapter 3	/	12	P
L	Critical Technology (3)	/ Sect. 4	/	31	L
E	Administrative Operational Use (7)	/ Chapter 2	/	13-32	E
	SAMPLE	SAMPLE	SAMPLE	SAMPLE	

Fill in limitation justification for your thesis below:

Limitation Justification Statement	Chapter/Section	Pages(s)
N/A	/	/
	/	/
	/	/
	/	/

7. MMAS Thesis Author's Signature: _____

STATEMENT A: Approved for public release; distribution is unlimited. (Documents with this statement may be made available or sold to the general public and foreign nationals).

STATEMENT B: Distribution authorized to U.S. Government agencies only (insert reason and date ON REVERSE OF THIS FORM). Currently used reasons for imposing this statement include the following:

1. Foreign Government Information. Protection of foreign information.
2. Proprietary Information. Protection of proprietary information not owned by the U.S. Government.
3. Critical Technology. Protection and control of critical technology including technical data with potential military application.
4. Test and Evaluation. Protection of test and evaluation of commercial production or military hardware.
5. Contractor Performance Evaluation. Protection of information involving contractor performance evaluation.
6. Premature Dissemination. Protection of information involving systems or hardware from premature dissemination.
7. Administrative/Operational Use. Protection of information restricted to official use or for administrative or operational purposes.
8. Software Documentation. Protection of software documentation - release only in accordance with the provisions of DoD Instruction 7930.2.
9. Specific Authority. Protection of information required by a specific authority.
10. Direct Military Support. To protect export-controlled technical data of such military significance that release for purposes other than direct support of DoD-approved activities may jeopardize a U.S. military advantage.

STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors: (REASON AND DATE). Currently most used reasons are 1, 3, 7, 8, and 9 above.

STATEMENT D: Distribution authorized to DoD and U.S. DoD contractors only; (REASON AND DATE). Currently most reasons are 1, 3, 7, 8, and 9 above.

STATEMENT E: Distribution authorized to DoD only; (REASON AND DATE). Currently most used reasons are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

STATEMENT F: Further dissemination only as directed by (controlling DoD office and date), or higher DoD authority. Used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R.

STATEMENT X: Distribution authorized to U.S. Government agencies and private individuals of enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25; (date). Controlling DoD office is (insert).